



Impact of macro-economic environment on the automotive industry

ACMA

Automotive Component Manufacturers Association of India

January 2023

© 2022 CRISIL Ltd. All rights reserved.

Content

[Economy overview](#)

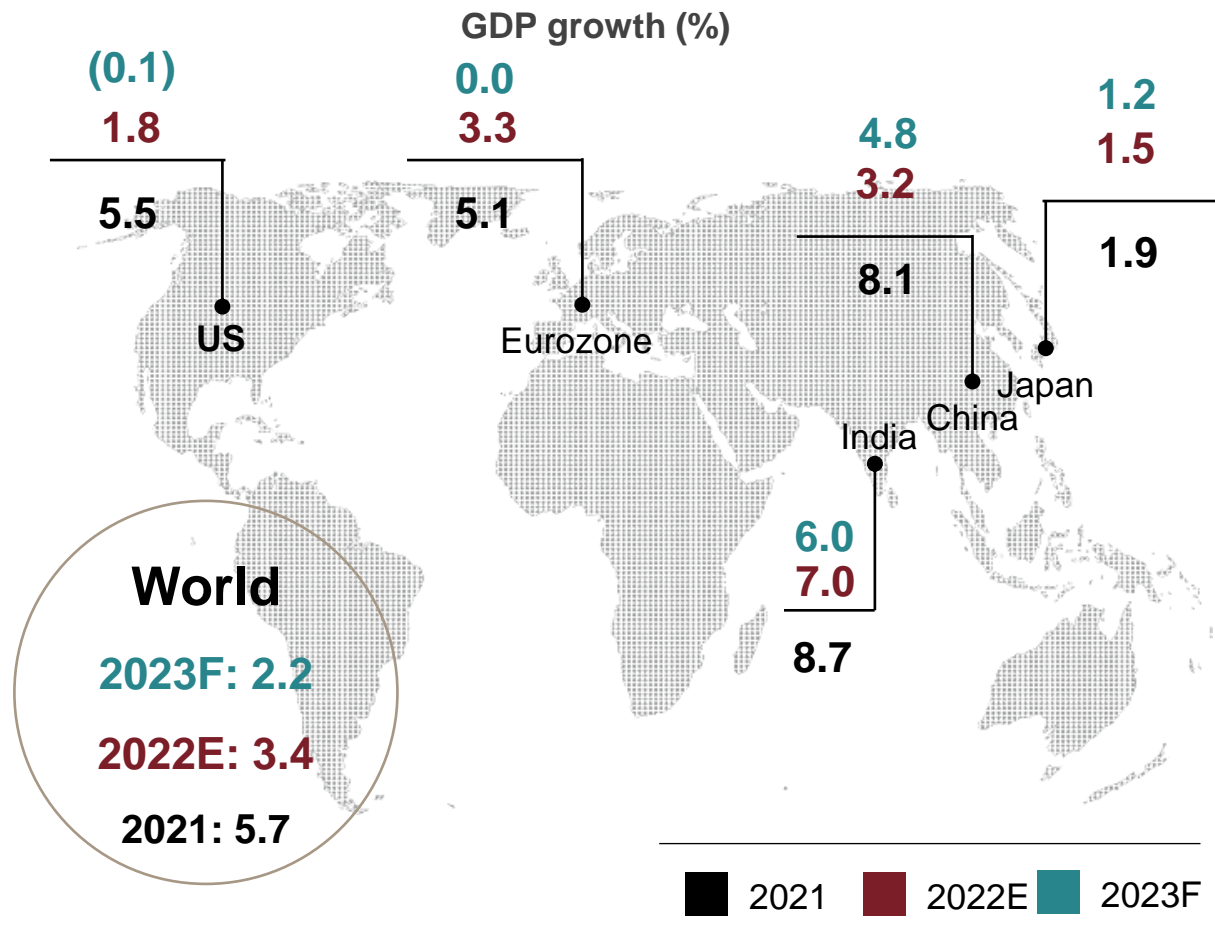
[Rural Scenario](#)

[Indian automobile industry](#)

[Auto Components](#)

Global scenario

Surprising resilience unlikely to last into 2023



- Highly anticipated global recession is yet to arrive
- Some resilience in global Q3 numbers
 - U.S. economy grew 2.6% on an annualized basis, positive consumption growth albeit at a slower pace
 - Eurozone economy surprised by growing at all, with output expanding by 0.8% annualized, with all major economies, including Germany, recording higher output.
 - China surprised on the upside as well, growing 3.9% on a year-on-year basis, boosted by net exports and government spending.
- However, sharp slowdown is all but inevitable, given the steepest rise in policy rates in four decades, ongoing geopolitical tensions, and energy supply constraints stemming from the Russia-Ukraine conflict
- Inflation remains stubbornly high, especially in the advanced economies. While policy rates have been lifted this year by up to 300 basis points (in the U.S. and Canada, less so elsewhere), overall inflation is yet to peak.

Slowdown expected globally, downward revision from previous forecast

GDP Growth Forecasts

In annual percentage change

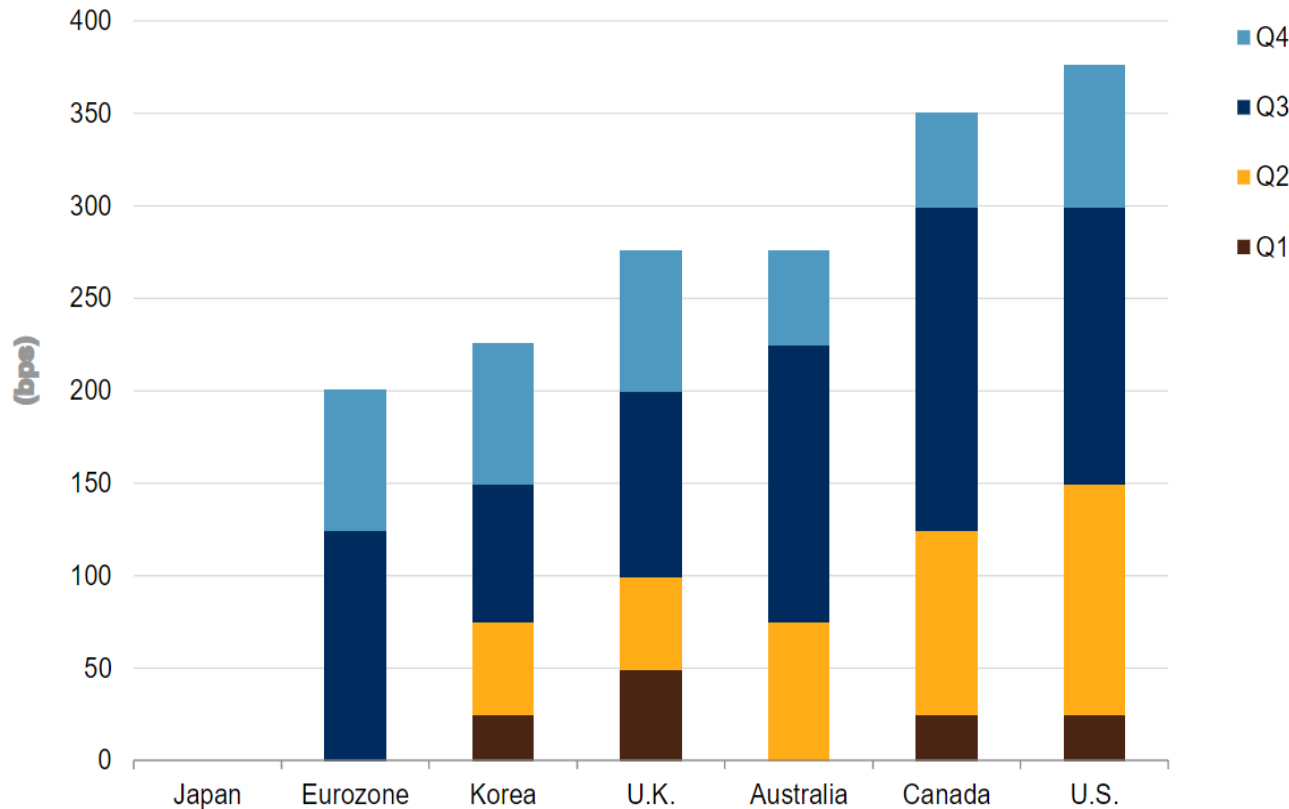
| | New forecast | | | |
|--------------|--------------|-------|------|------|
| | 2022 | 2023 | 2024 | 2025 |
| U.S. | 1.8 | (0.1) | 1.4 | 1.8 |
| Eurozone | 3.3 | (0.0) | 1.4 | 1.5 |
| Germany | 1.8 | (0.5) | 1.0 | 1.3 |
| France | 2.5 | 0.2 | 1.6 | 1.5 |
| Italy | 3.8 | (0.1) | 1.4 | 1.2 |
| Spain | 4.6 | 0.9 | 1.9 | 2.5 |
| U.K. | 4.3 | (1.0) | 1.3 | 1.5 |
| China | 3.2 | 4.8 | 4.7 | 4.6 |
| Japan | 1.5 | 1.2 | 1.1 | 1.1 |
| India* | 7.0 | 6.0 | 6.9 | 6.9 |
| Mexico | 2.6 | 0.8 | 2.0 | 2.3 |
| Brazil | 2.9 | 0.5 | 2.0 | 2.2 |
| South Africa | 1.9 | 1.5 | 1.7 | 1.7 |
| World | 3.4 | 2.2 | 3.1 | 3.3 |

| | Change from previous CCC round | | | |
|--------------|--------------------------------|-------|-------|-------|
| | 2022 | 2023 | 2024 | 2025 |
| U.S. | 0.2 | (0.3) | (0.2) | (0.1) |
| Eurozone | 0.2 | (0.3) | (0.3) | (0.2) |
| Germany | 0.3 | (0.2) | (0.2) | 0.0 |
| France | 0.1 | 0.0 | (0.2) | 0.0 |
| Italy | 0.4 | 0.0 | (0.1) | 0.1 |
| Spain | 0.1 | (0.2) | (0.2) | (0.1) |
| U.K. | 1.0 | (0.6) | (0.1) | (0.1) |
| China | 0.5 | 0.1 | (0.1) | (0.1) |
| Japan | (0.1) | (0.2) | (0.3) | (0.2) |
| India* | (0.3) | (0.5) | 0.2 | 0.0 |
| Mexico | 0.5 | 0.0 | (0.0) | 0.1 |
| Brazil | 0.4 | (0.1) | 0.0 | 0.0 |
| South Africa | (0.1) | (0.1) | (0.1) | 0.0 |
| World | 0.3 | (0.2) | (0.1) | (0.1) |

© 2022 CRISIL Ltd. All rights reserved.

Inflation stickiness

Policy Rate Hikes In 2022--G20 Advanced Economies



- Large and frequent rate rises were needed to bring the monetary policy stance beyond neutral in order to slow activity, bring price pressures down and bolster credibility.
- While inflation fighting is largely a domestic affair, there is an international spillover dimension as well, given the the U.S. dollar as the main global safe haven and U.S. Treasury as the main global reserve asset
- Thus, in effect, that other countries import U.S. inflation through their weaker currencies and that local central banks need to do more to bring local inflation under control.
- On the real side, tighter monetary policy means lower output and inflation than would otherwise be required.
- The macro policy mix will become an increasingly important issue as inflation remains elevated and output slows.

© 2022 CRISIL Ltd. All rights reserved.

India landscape

Macroeconomic outlook

| Segments (% Growth Y-o-Y) | FY 15 | FY 16 | FY 17 | FY 18 | FY 19 | FY 20 | FY 21 | FY22 | FY23E | FY24P |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|------|--------|-------|
| GDP (% Growth Y-o-Y) | 7.4 | 8.0 | 8.3 | 6.8 | 6.5 | 3.7 | (6.6) | 8.7 | 7.0 | 6.0 |
| CAD (as a % of GDP) | -1.3 | -1.1 | -0.7 | -1.8 | -2.1 | -0.9 | +0.9 | -1.2 | -3.2 | -2.4 |
| 10-year G-sec yield (end-March) | 7.7 | 7.5 | 6.8 | 7.6 | 7.5 | 6.2 | 6.2 | 6.8 | 7.5 | 7.0 |
| PFCE | 6.4 | 7.9 | 8.1 | 6.2 | 7.1 | 5.2 | (6.0) | 7.6 | 7.0 | 6.2 |
| Crude oil (\$/barrel/CY) | 99 | 52 | 44 | 54.5 | 71 | 64 | 42.3 | 70.4 | 98-103 | 80-85 |
| Inflation (Consumer Price Index) | 5.9 | 4.9 | 4.5 | 3.6 | 3.4 | 4.8 | 6.2 | 5.5 | 6.8 | 5.0 |

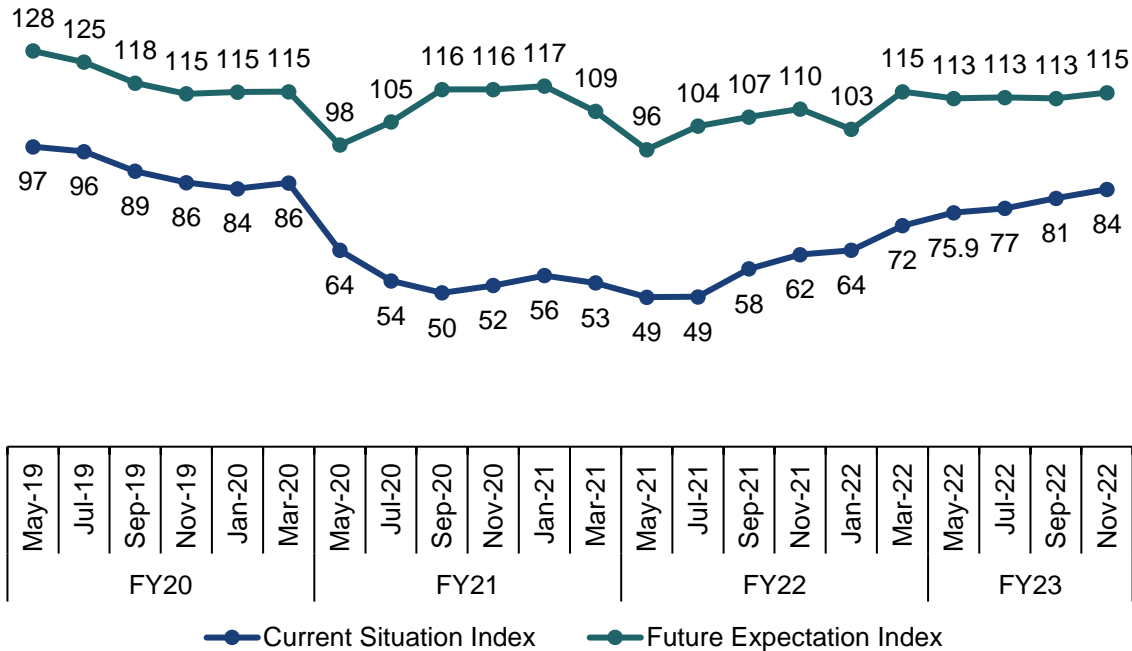
Note: Crude oil prices are for CY
Source: CSO, RBI and CRISIL estimates

Perceptions and Expectations on the General Economic Situation

Consumer Confidence Index

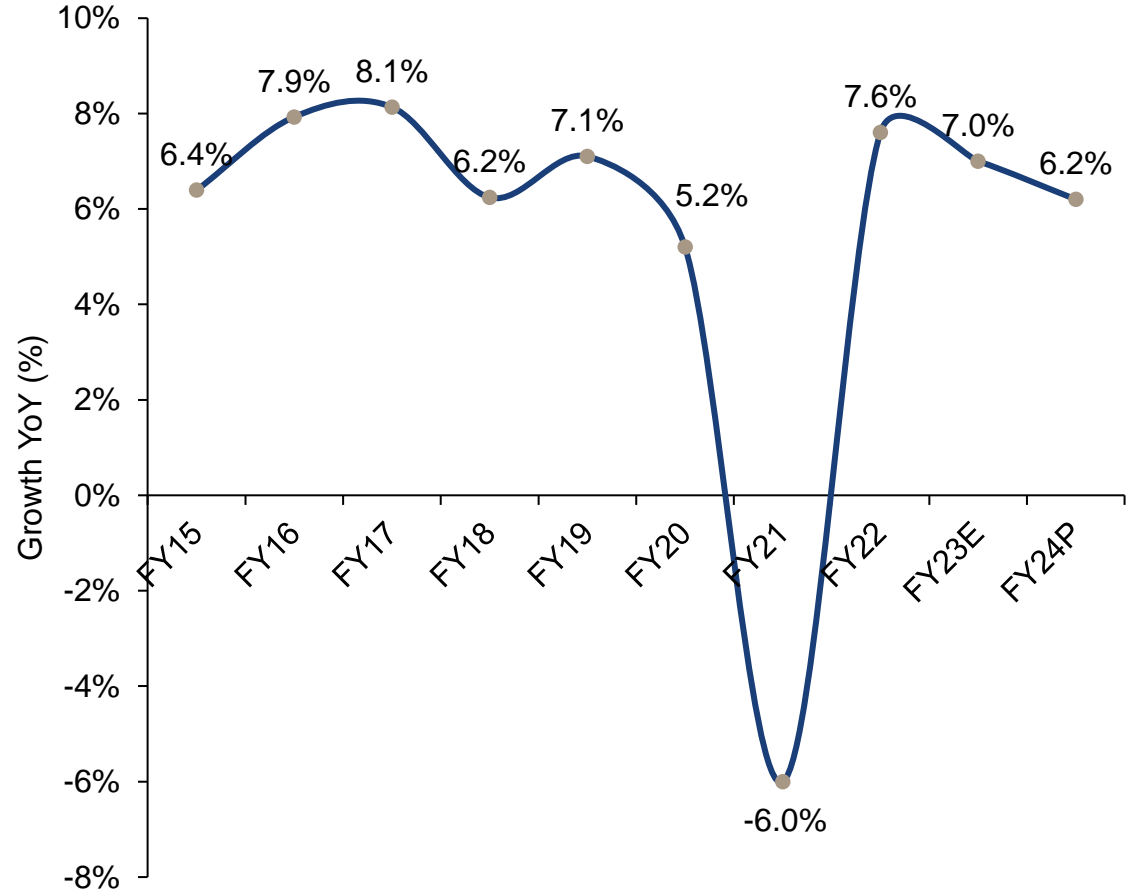


- Current situation index has shown further improvement in Nov backed by better perceptions on general economic situation, employment and household income
- Future Expectation index has also shown some improvement after remaining near stagnant during the current fiscal



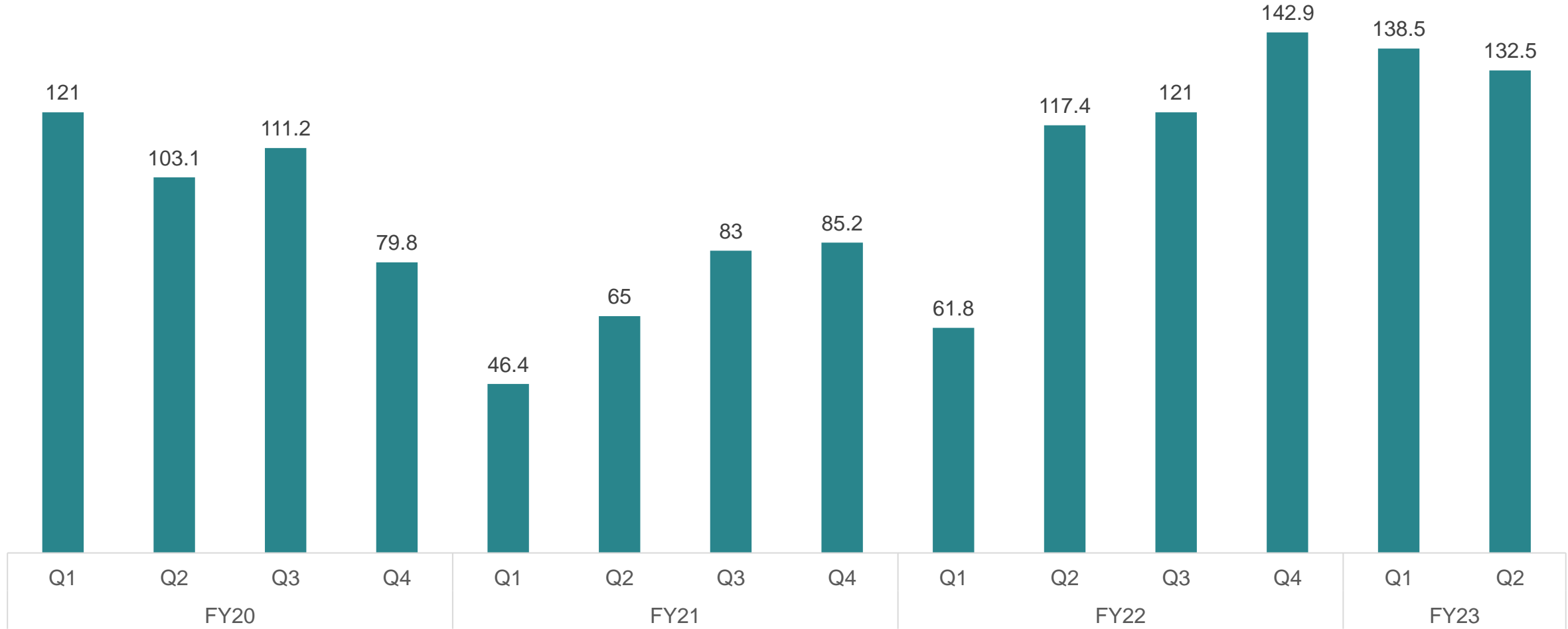
Source: CRISIL MI&A, RBI, NCAER

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



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

Business Confidence Index is on shaky grounds(1/2)

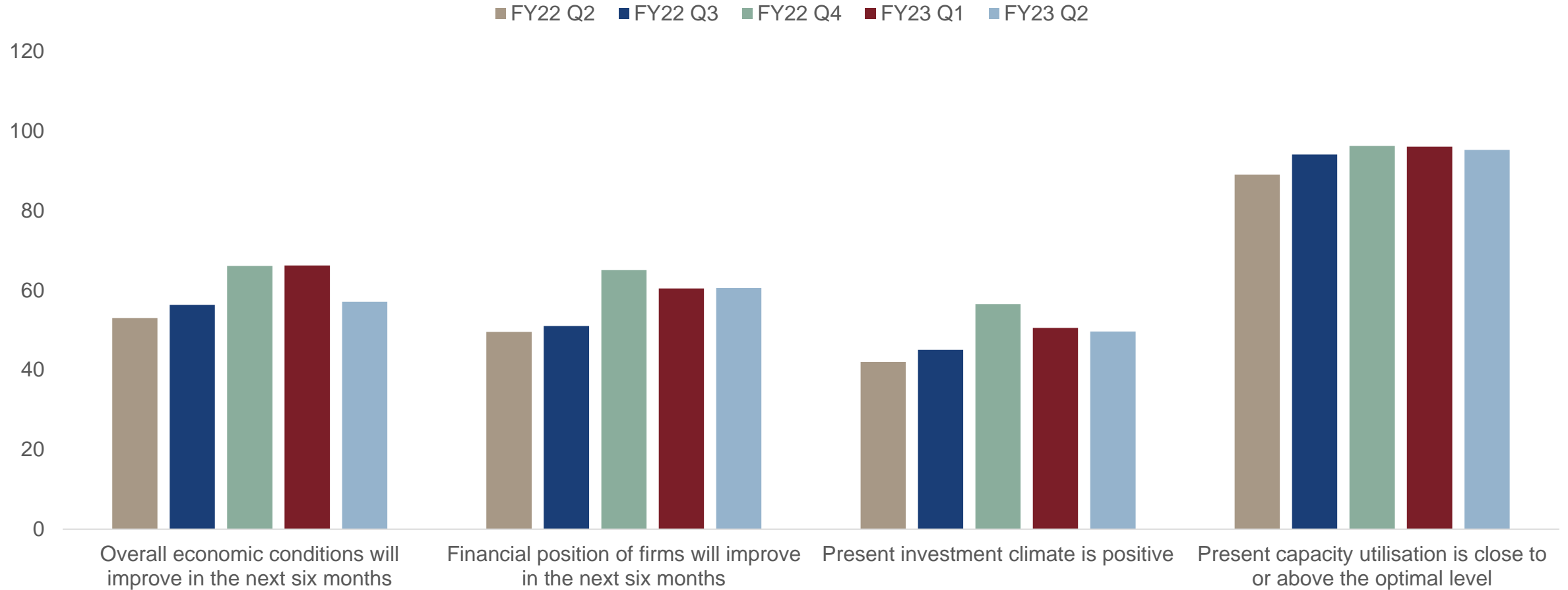


© 2022 CRISIL Ltd. All rights reserved.

Source: CRISIL MI&A, NCAER

Business Confidence Index is on shaky grounds (2/2)

Components of Business Confidence Index



© 2022 CRISIL Ltd. All rights reserved.

Source: CRISIL MI&A, NCAER

High frequency parameters

| Segments | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 | Oct-22 | Nov-22 | Dec-22 |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Core Sectors | | | | | | | | | | | | | | | | | | | | | |
| Coal | 9% | 7% | 7% | 19% | 21% | 8% | 15% | 8% | 5% | 8% | 7% | 0% | 29% | 25% | 31% | 11% | 8% | 12% | 4% | 12% | |
| Crude Oil | -2% | -6% | -2% | -3% | -2% | -2% | -2% | -2% | -2% | -2% | -2% | -3% | -1% | 5% | -2% | -4% | -3% | -2% | -2% | -1% | |
| Natural Gas | 25% | 20% | 21% | 19% | 21% | 28% | 26% | 24% | 20% | 12% | 13% | 8% | 6% | 7% | 1% | 0% | -1% | -2% | -4% | -1% | |
| Petroleum Refinery Products | 31% | 15% | 2% | 7% | 9% | 6% | 14% | 4% | 6% | 4% | 9% | 6% | 9% | 17% | 15% | 6% | 7% | 7% | -3% | -9% | |
| Fertilizers | 4% | -10% | 2% | 1% | -3% | 0% | 0% | 3% | 4% | -2% | -1% | 15% | 9% | 23% | 8% | 6% | 12% | 12% | 5% | 6% | |
| Steel | 494% | 55% | 25% | 9% | 5% | 3% | 5% | 1% | -1% | 3% | 6% | 4% | -1% | 15% | 3% | 6% | 2% | 7% | 4% | 11% | |
| Cement | 607% | 12% | 8% | 22% | 36% | 11% | 15% | -3% | 13% | 14% | 5% | 9% | 8% | 26% | 19% | 2% | 2% | 12% | -4% | 29% | |
| Electricity | 39% | 7% | 8% | 11% | 15% | 1% | 3% | 2% | 3% | 1% | 4% | 5% | 11% | 22% | 16% | 2% | 1% | 11% | 0% | 12% | |
| Auto-offtake | | | | | | | | | | | | | | | | | | | | | |
| Two Wheelers | NM | 26% | 3% | -2% | -15% | -17% | -25% | -34% | -11% | -21% | -27% | -21% | 15% | 250% | 23% | 10% | 16% | 14% | 2% | 16% | 3% |
| Cars | NM | 113% | 118% | 45% | | | | | | | | | | | | | | | | | |
| Uvs + Vans | NM | 118% | | | 8% | -41% | -27% | -19% | -13% | -8% | -7% | -4% | -4% | 185% | 19% | 11% | 21% | 91% | 29% | 31% | 8% |
| Three Wheelers | NM | -49% | -9% | 41% | 60% | 54% | 19% | -7% | 25% | -10% | -2% | -1% | 51% | 2162% | 184% | 73% | 65% | 73% | 70% | 102% | 37% |
| Auto-Vaahan | | | | | | | | | | | | | | | | | | | | | |
| 2W | 171% | 155% | 18% | 28% | 7% | -9% | -6% | 0% | -19% | -13% | -10% | -4% | 42% | 214% | 20% | -9% | 9% | 18% | 71% | 29% | -3% |
| Cars+Uvs | 913% | 171% | 43% | 63% | 39% | 22% | -11% | -19% | -10% | -10% | -7% | -5% | 31% | 209% | 41% | -3% | 8% | 11% | 48% | 21% | 10% |
| Others | | | | | | | | | | | | | | | | | | | | | |
| PMI Manufacturing | 55.5 | 50.8 | 48.1 | 55.3 | 52.3 | 53.7 | 55.9 | 57.6 | 55.5 | 54 | 54.9 | 54 | 54.7 | 54.6 | 53.9 | 56.4 | 56.2 | 55.1 | 55.3 | 55.7 | 57.8 |
| IIP Overall | 134% | 29% | 14% | 11% | 12% | 3% | 4% | 1% | 1% | 1% | 2% | 2% | 7% | 20% | 12% | 2% | -1% | 3% | -4% | 7% | |
| Diesel consumption | 106% | 1% | -2% | 11% | 16% | 0% | -6% | -8% | 2% | -6% | -1% | 7% | 8% | 32% | 24% | 8% | 13% | 14% | 6% | 19% | 7% |
| Rail freight (NTKM) | 87% | 56% | 27% | 21% | 20% | 9% | 21% | 15% | 8% | 11% | 11% | 18% | 21% | 19% | 18% | 18% | 13% | 10% | 1% | 4% | 6% |
| Bitumen consumption | 343% | 12% | -23% | 5% | 16% | -2% | 5% | -22% | -18% | -2% | 3% | -12% | -8% | 6% | 22% | 1% | 51% | 16% | -11% | 39% | |
| Total credit | 6% | 5% | 6% | 6% | 7% | 7% | 7% | 7% | 10% | 7% | 8% | 9% | 10% | 12% | 12.0% | 13% | 14% | 15% | 132% | 131% | 12% |
| Industry credit | 0% | 1% | 0% | 1% | 2% | 2% | 4% | 4% | 8% | 6% | 11% | 7.00% | 10% | 11% | 11.0% | 12% | 16% | 15% | 12% | 13% | |
| -Micro and Small | 4% | 5% | 6% | 9% | 10% | 10% | 12% | 13% | 20% | 20% | 29% | 32.00% | 46% | 49% | 48% | 44% | 41% | 45% | 39% | 20% | |
| -Medium | 50% | 52% | 61% | 66% | 63% | 49% | 49% | 49% | 87% | 75% | 82% | 55.00% | 52% | 50% | 49% | 34% | 30% | 29% | 22% | 30% | |
| -Large | -2% | -2% | -3% | -3% | -1% | -1% | 1% | 0% | 1% | 0% | 4% | 0.00% | 1% | 2% | 3% | 5% | 11% | 8% | 6% | 11% | |

Hi-Frequency indicators

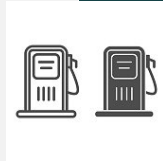
How are they shaping?

Mobility indicators and Vaccination progress



Mobility Indicators in first half of October month indicate that most segments such as grocery and pharmacy, parks, retail and recreation and transit stations showing mixed trends

Fuel and Power consumption



Power consumption witnessed a 10% year on year growth in December 2022 . Diesel consumption witnessed growth of 6.5% in December 2022 on y-o-y basis while petrol consumption saw a growth of 5.9% for the same

Freight movement & Transporter Profitability



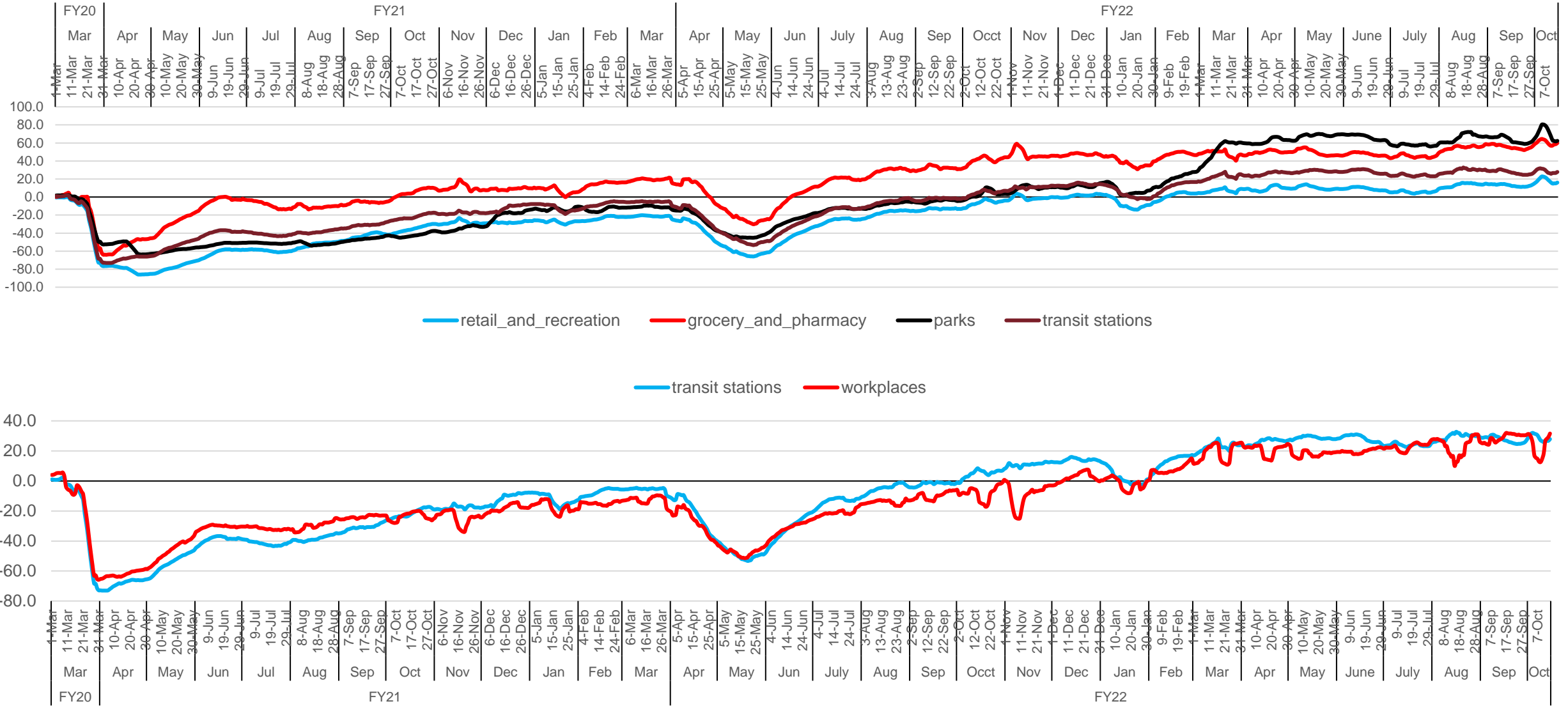
- E-waybill generation has been at daily average of 1.73mn in December 2022 compared to November 2022 daily average of 1.71mn for intra-city
- While for inter-city the same has been about daily average of 0.99mn in December 2022 compared with daily average of 0.98mn in November 2022

STU Tendering Tracker

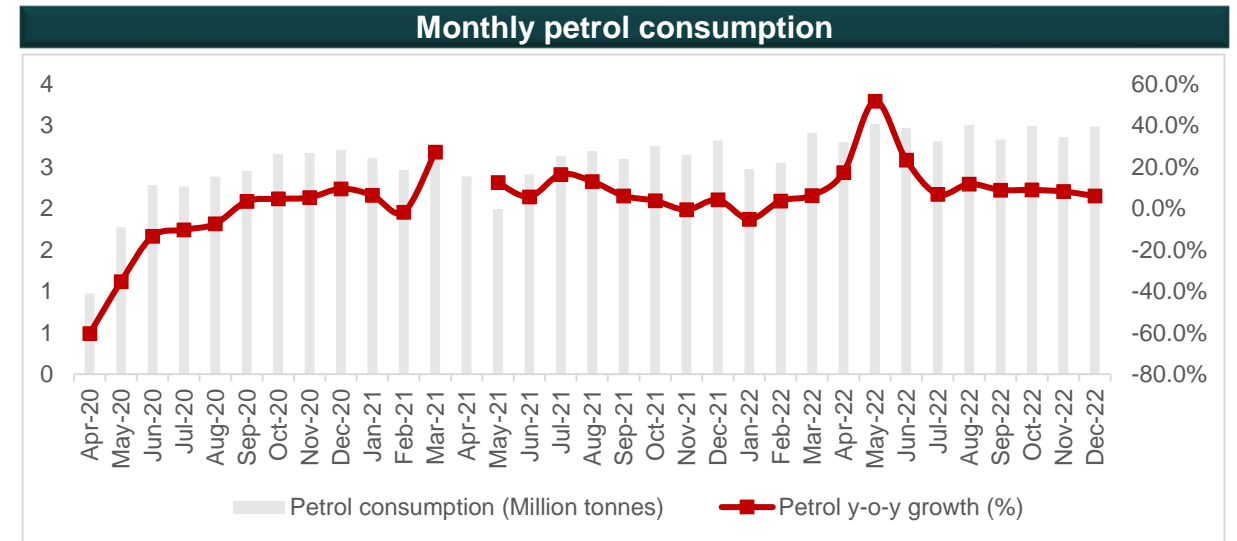
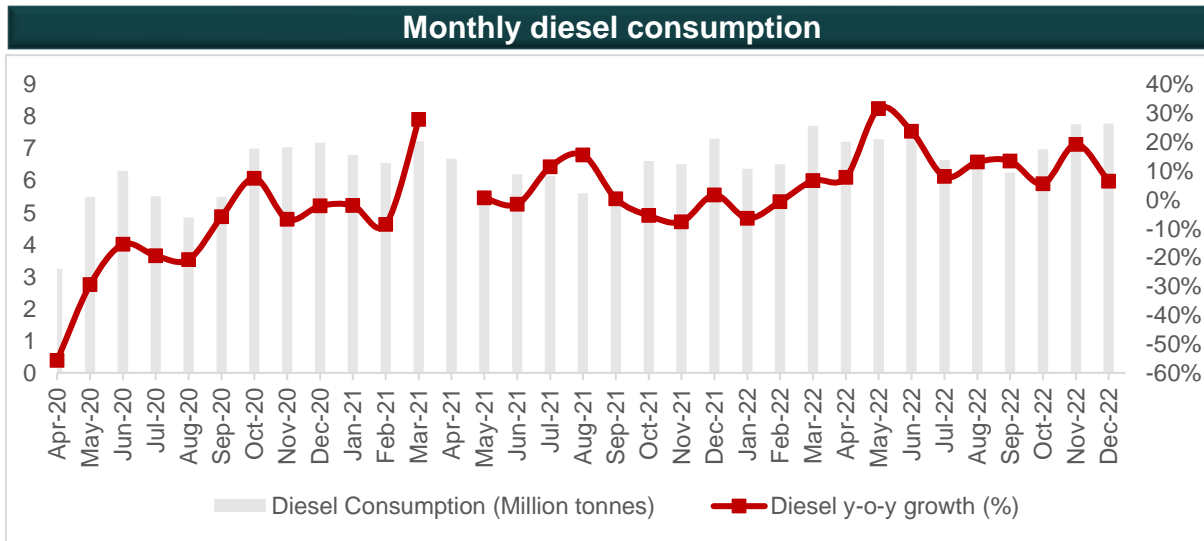
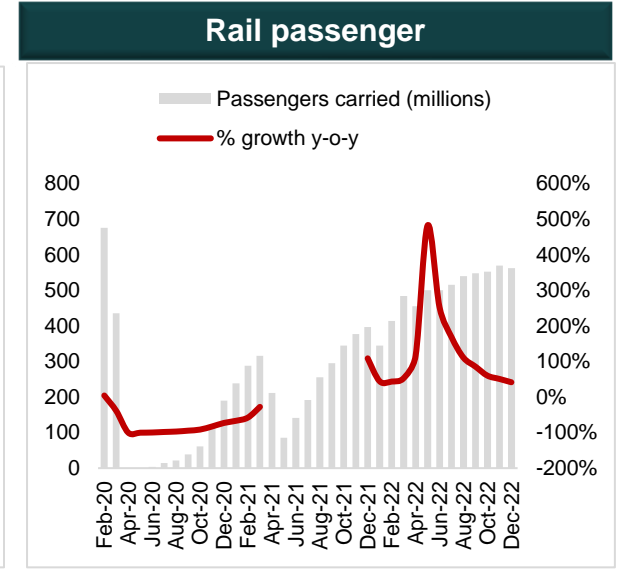
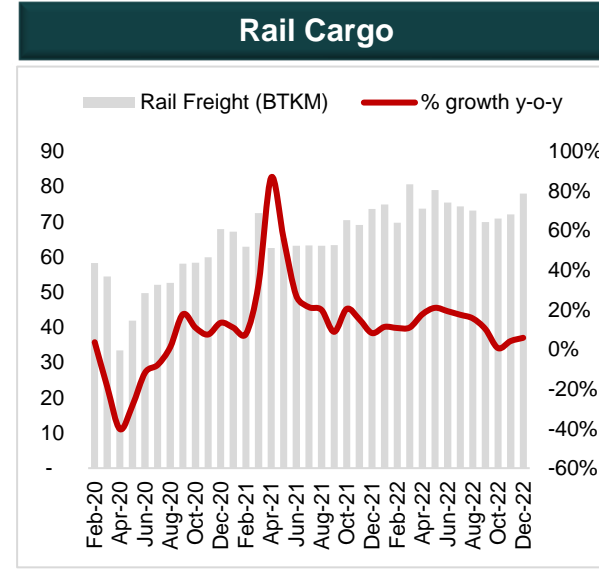
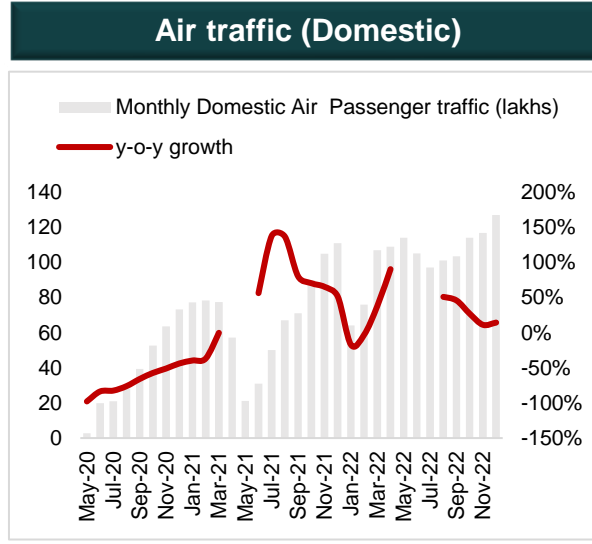
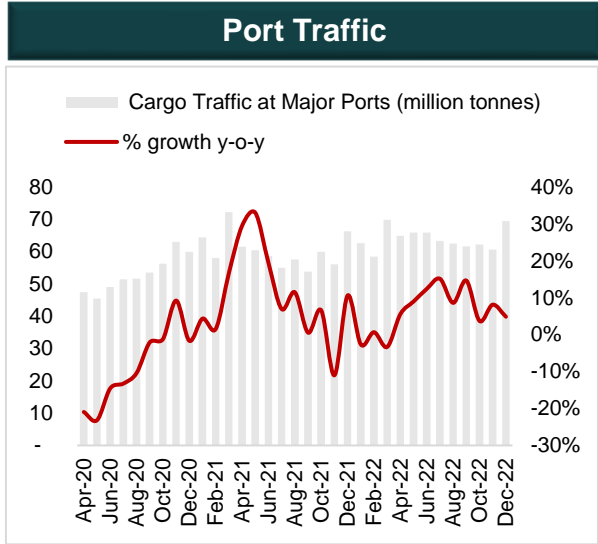


Interactions indicate STU tenders from states like Maharashtra, Karnataka, Uttar Pradesh, Tamil Nadu, Telangana, Kerala can see delivery spread over the next 12-15 months

Mobility indicators-segmental

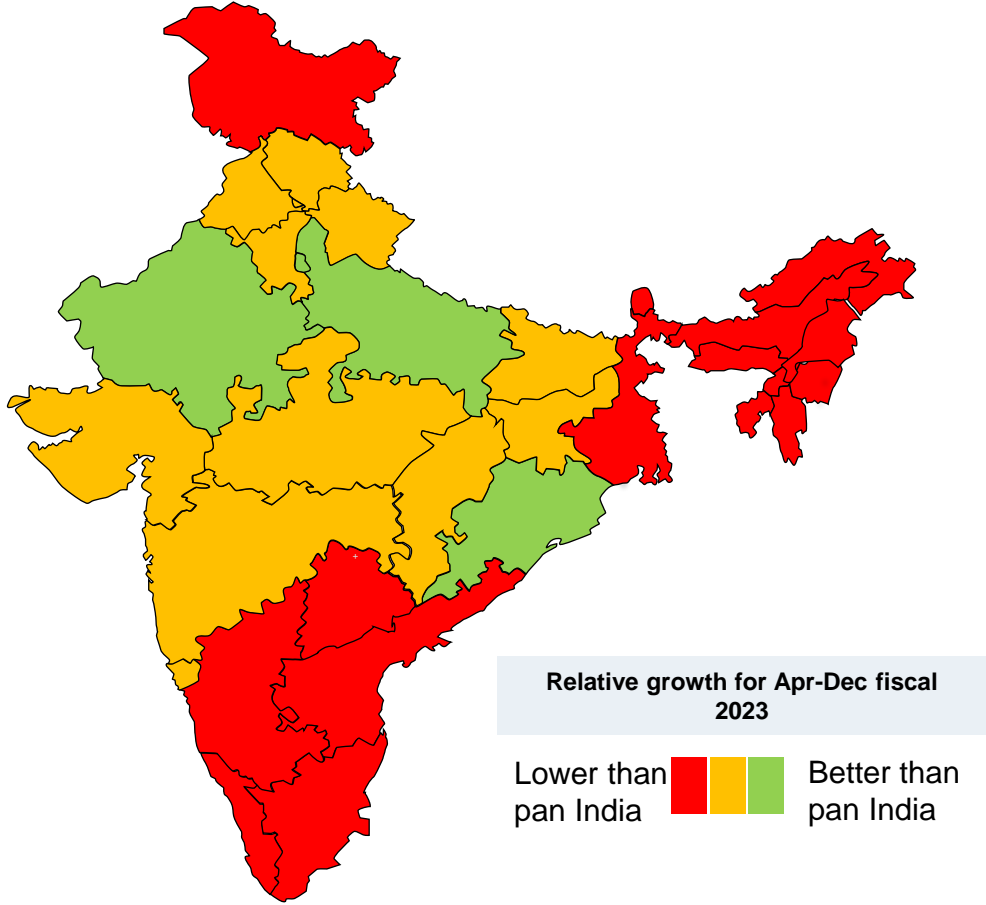


Overall mobility



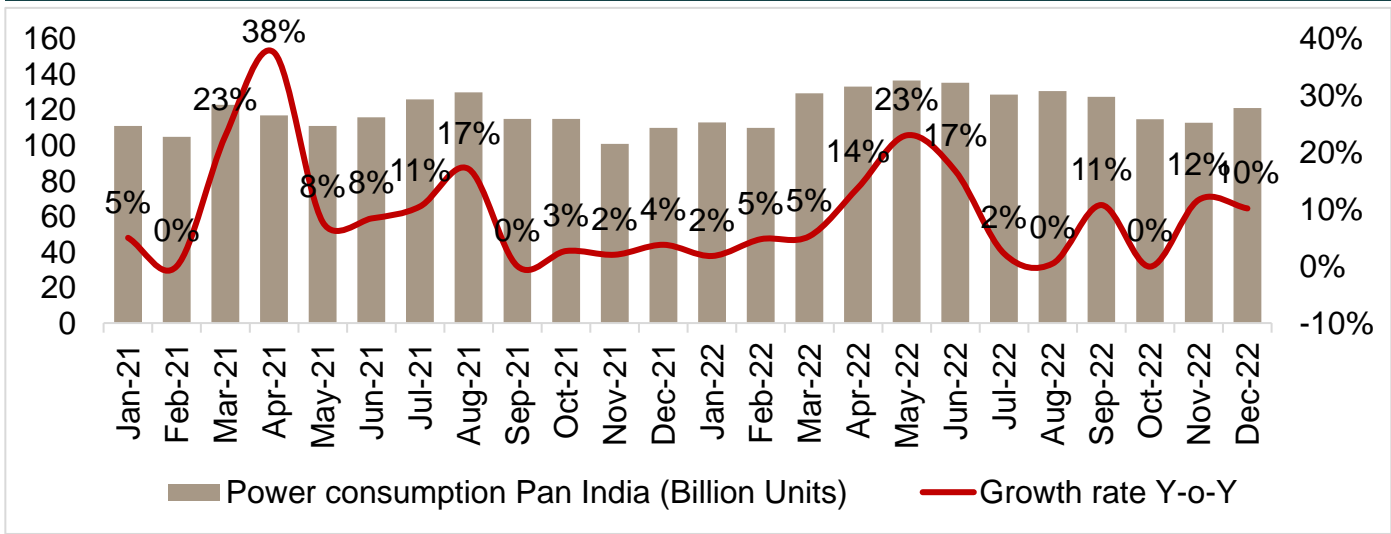
Power Consumption: North region performed better than other regions in Apr–Dec FY23 period

Eastern region seeing a slowdown in power consumption

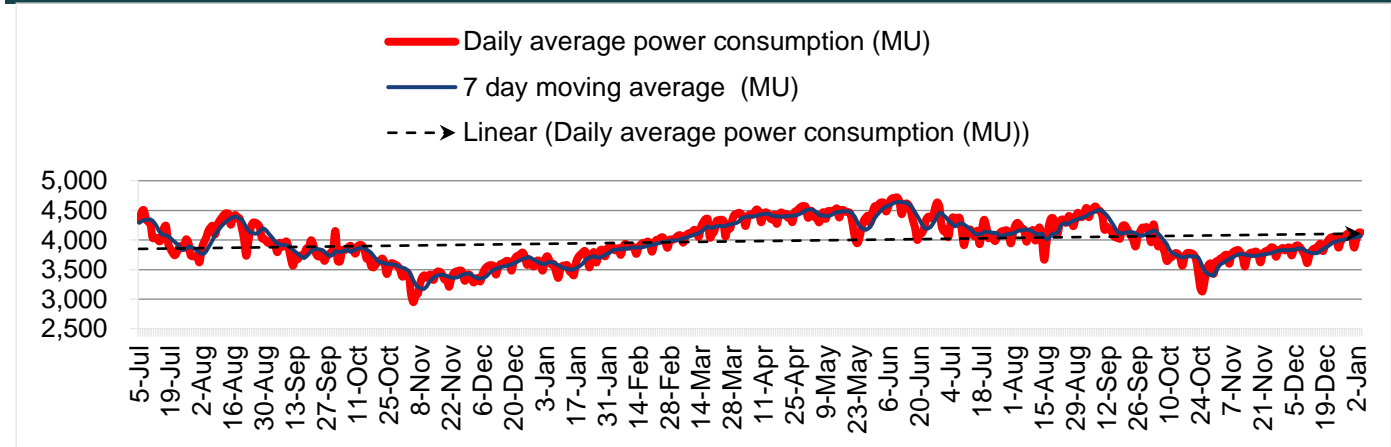


Source: Posoco, CRISIL MI&A,

Monthly trend for power consumption in India

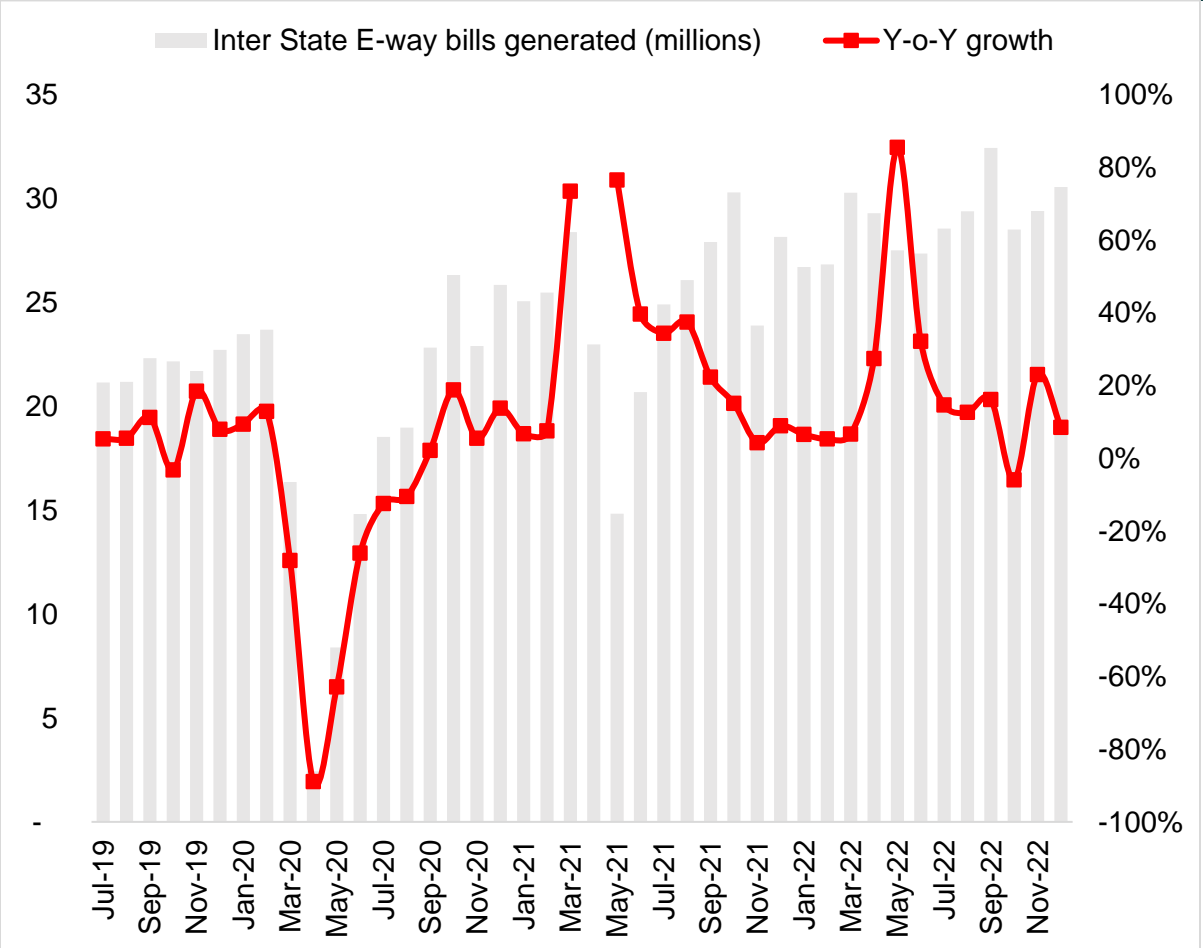
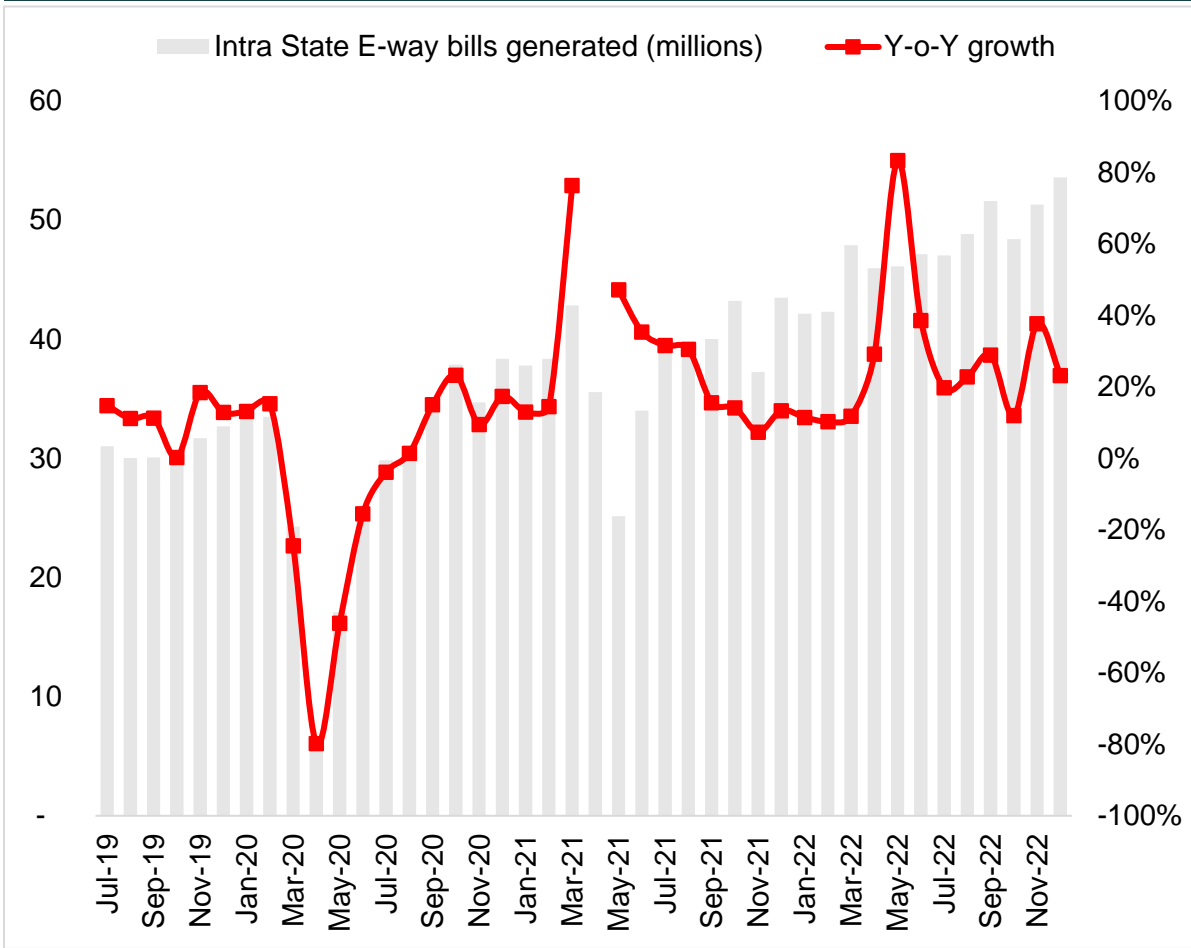


Daily trend for power consumption in India



E-waybill trend

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

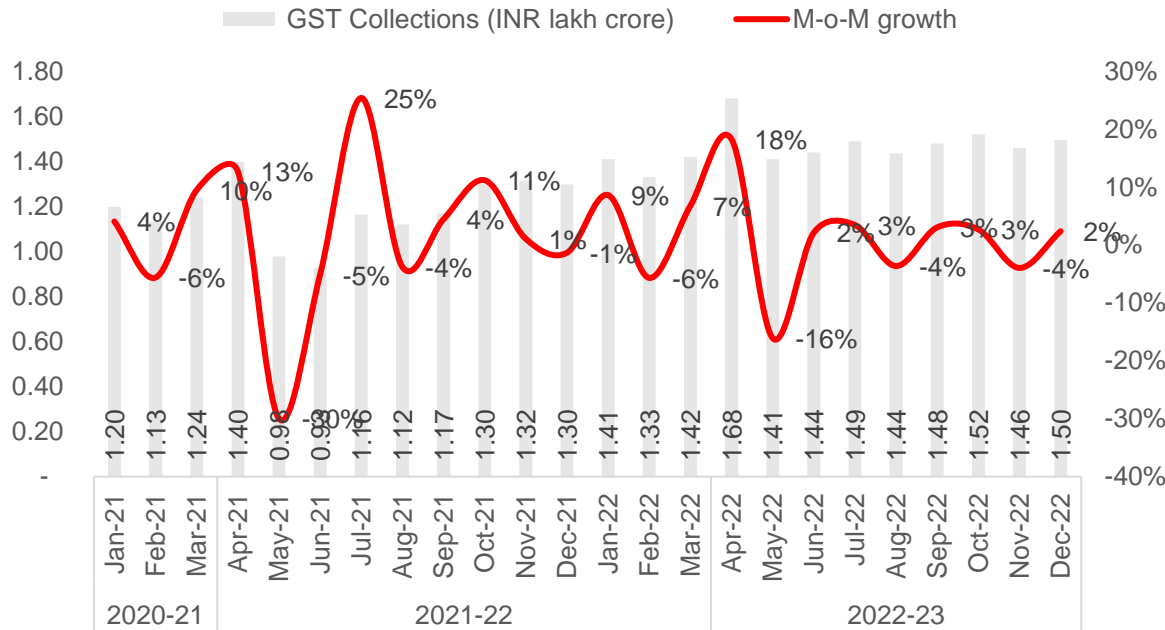


Note:

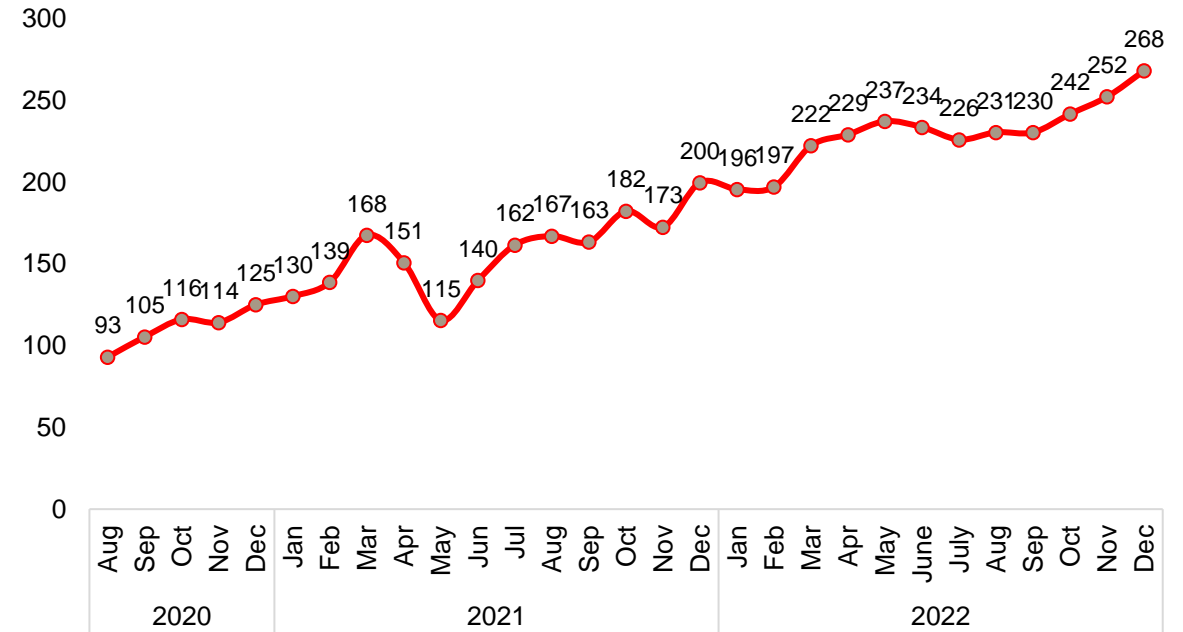
1. y-o-y growth not mentioned in Apr-21 as values are not meaningful due to low base effect of previous year caused by the nationwide lockdown.
2. Agri, last mile distribution and market load operations do not come under ambit of E-way bill hence the E-way bills mentioned here may not represent the entire movement of goods in the country
3. Source: GST Network, CRISIL MI&A

December's GST revenues stands at about ₹1.50 trillion

GST collections



Fastag trend (Feb 2020 level =100)

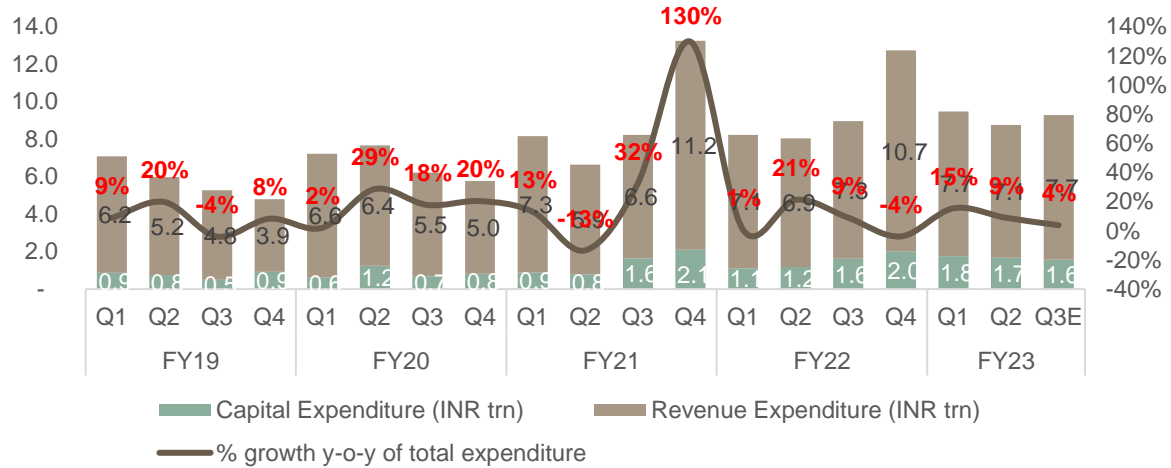


- Fastag recorded an index of 268 in December 2022, the highest level till now
- India's Goods and Services Tax (GST) revenues rose to nearly ₹1.5 lakh crore in December 2022, 15% higher than a year ago and 2.5% over November's collections that had marked a three-month low.

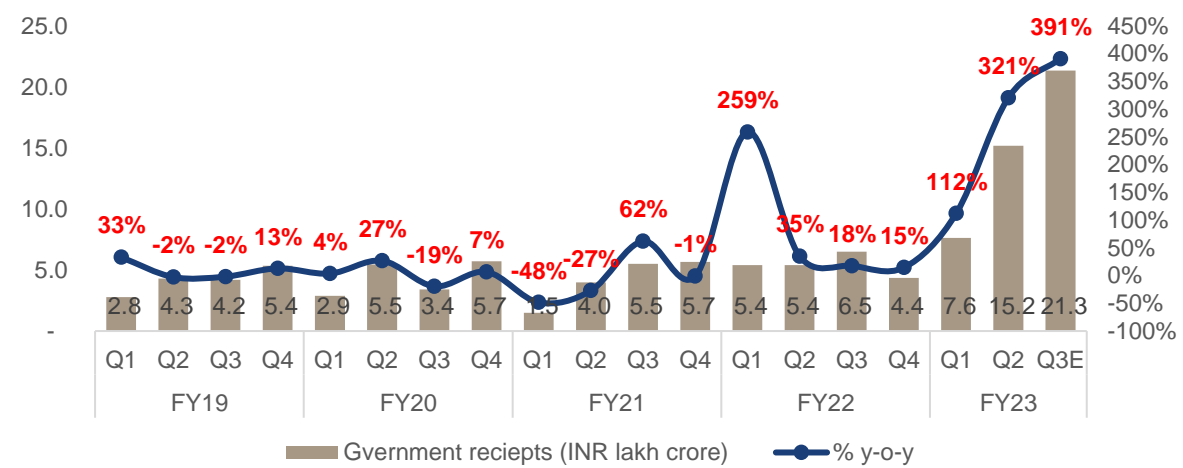
Source: GST Network, NPCI, CRISIL MI&A

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

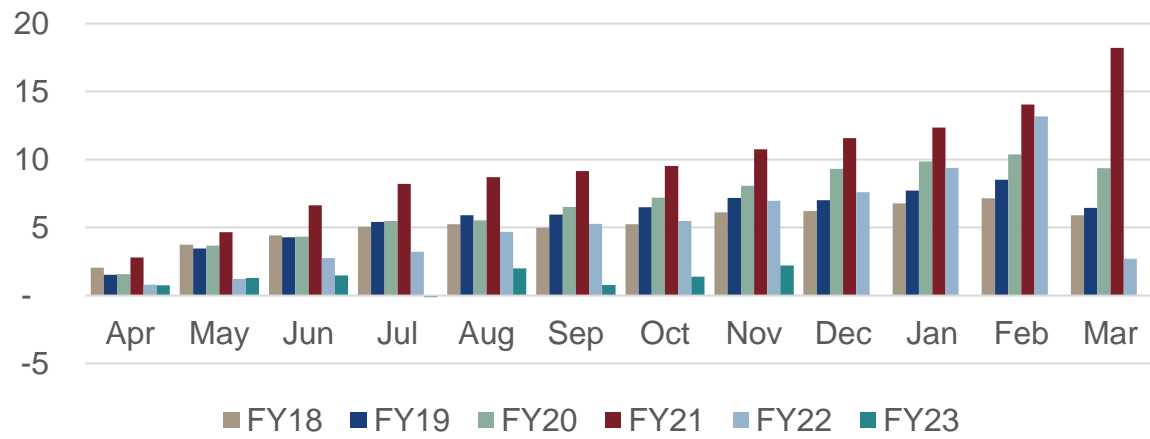
Government expenditure better in Q3FY23 than Q2FY23



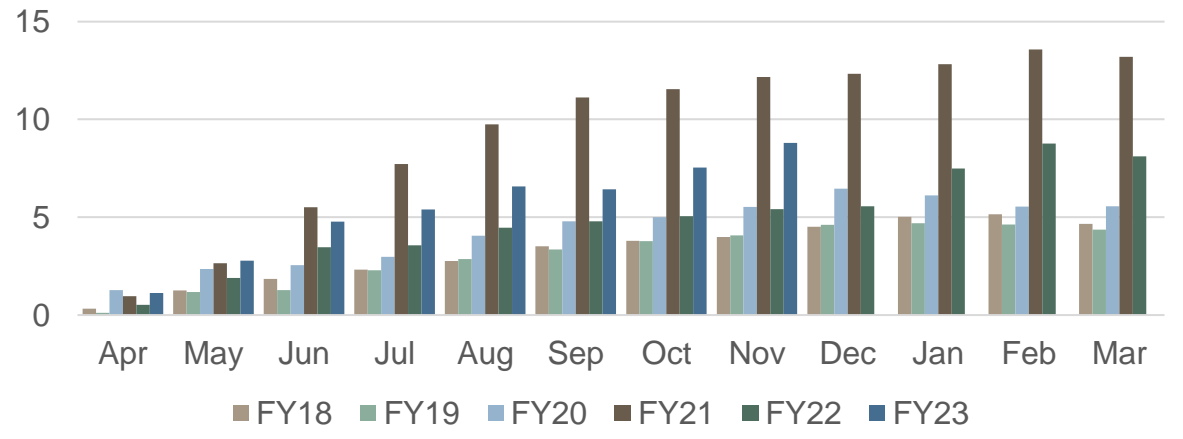
Receipts in Q3FY23 improve



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

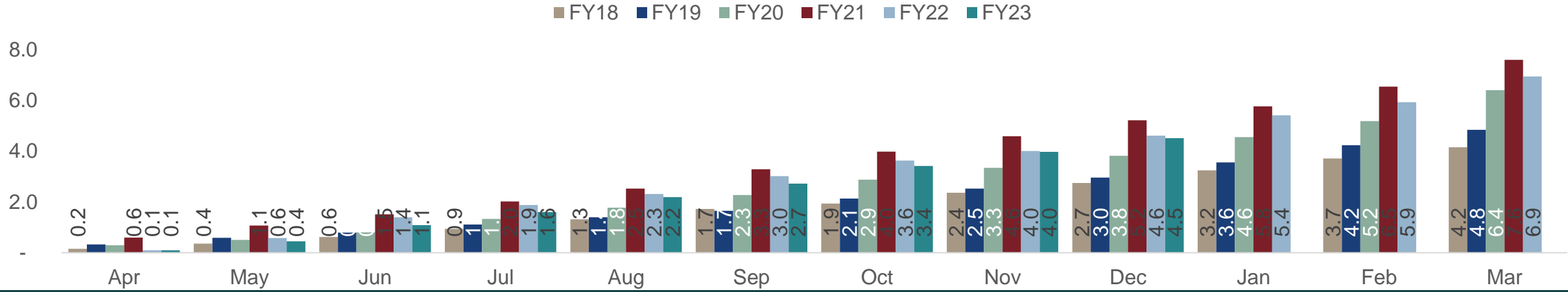


m-o-m build-up of cumulative market borrowings of the govt. (INR trillion)

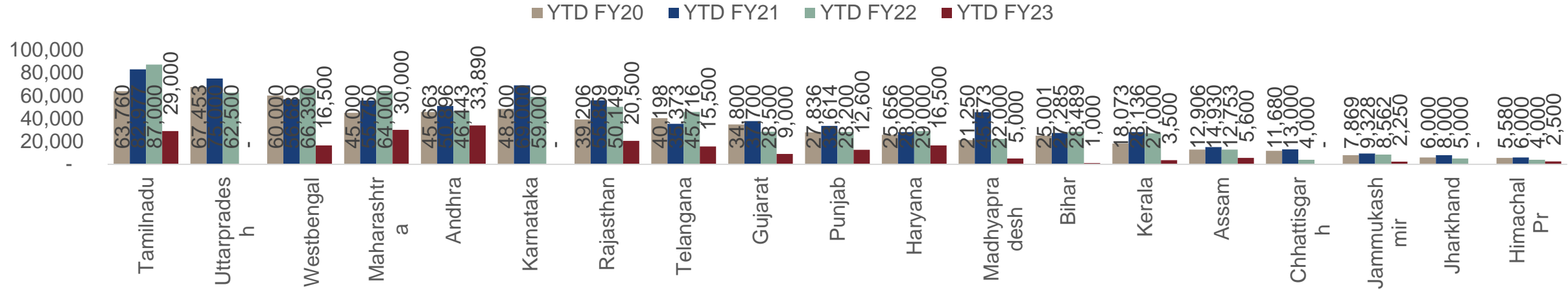


State government borrowings similar to last year

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



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



Rural Scenario and government spending

Improvement in farm sentiment with healthy rabi expectation

Agri scenario lends support to a struggling economy

Government support

Crop scenario



- Kharif CVI expected to be stable in FY23 even though production was slightly higher on-year.
- Unseasonal rainfall in October led to deterioration in crop quality which resulted in lower crop prices and thus impacting farm income
- Positive sentiments for the upcoming rabi season on account of healthy reservoir levels

PM Kissan and PM Garib Kalyan Yojana



- Allocation for PM Kisan in the union budget for fiscal 2023 has been Rs.68000 cr, which is only marginally higher than the revised estimates for fiscal 2022, at Rs.65000 cr.
- After 28 months since the scheme started, the Union cabinet has decided to allow PM Kisan Anna Yojana (PMGKAY) to sunset.
- The government will instead grant free rations for a whole year under the National Food Security Act (NFSA) from January 1, 2023.

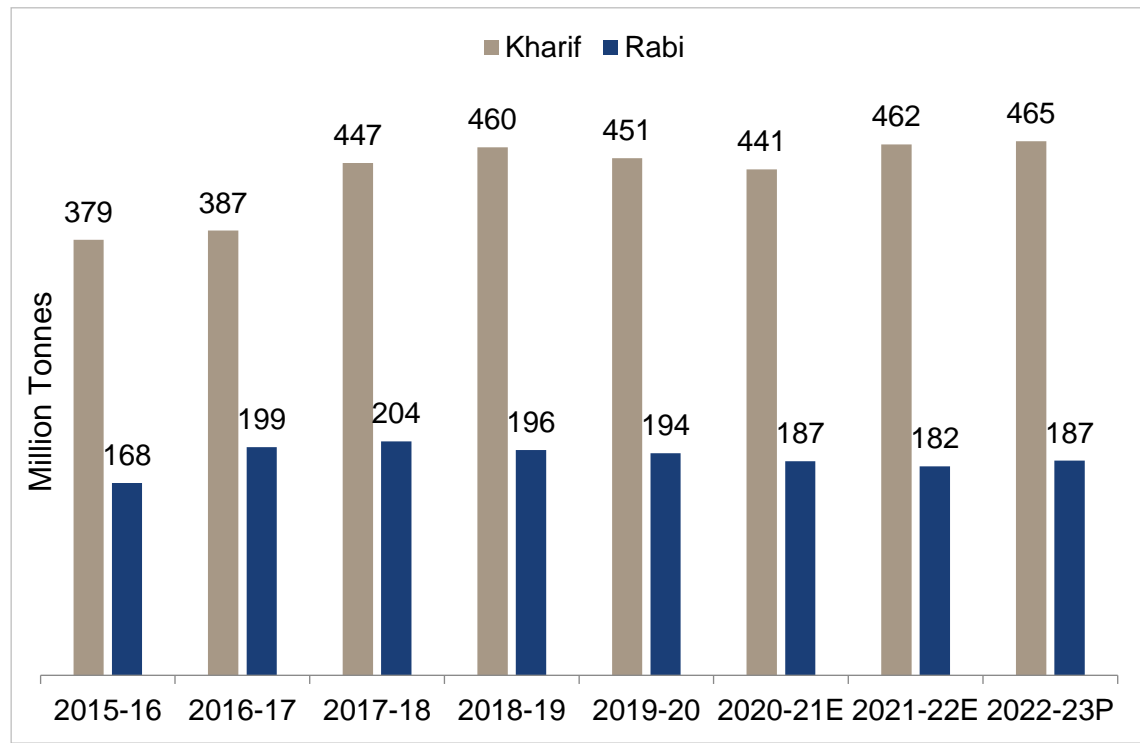
MNREGA



- In fiscal 2022, Rs 106,443 cr was spent in comparison to Rs. 98,000 cr allocated
- For fiscal 2023, allocated expenditure has been cut by 25% to Rs.73,000 cr.
- As of 30 Dec 2022, around 48.7 million households have worked under the scheme in FY23, while the full-year number in last fiscal was around 72.6 million

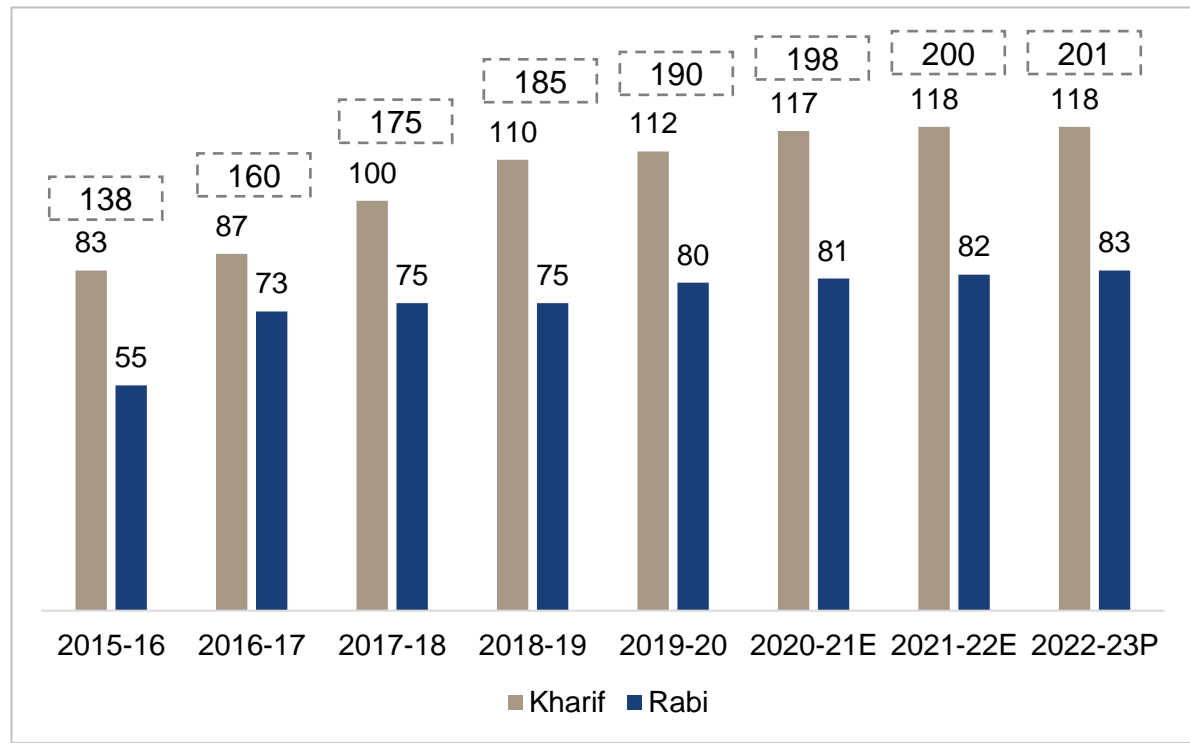
Healthy reservoir levels to result in better crop output and support good income from rabi crop

Food-grain Crop Production



Source: CRISIL MI&A

Food-grain CVI (Crop Value Index)



Source: CRISIL MI&A;

Note: CVI- Crop value index, CVI has been indexed to 100 at 2014-12

Total CVI



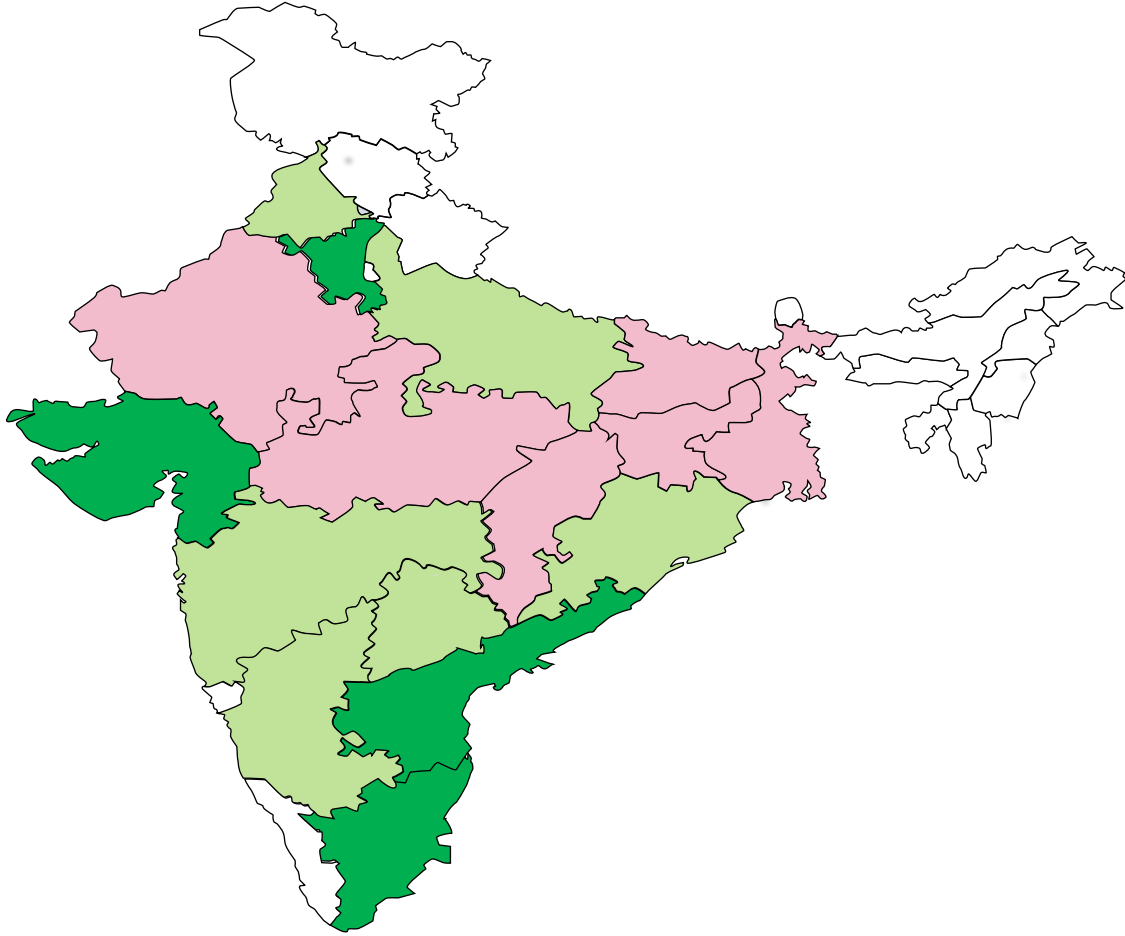
Rabi production is expected to be higher than previous year on account of good weather conditions & healthy reservoir levels



Higher prices on-year to result in improved income levels as compared to the previous year

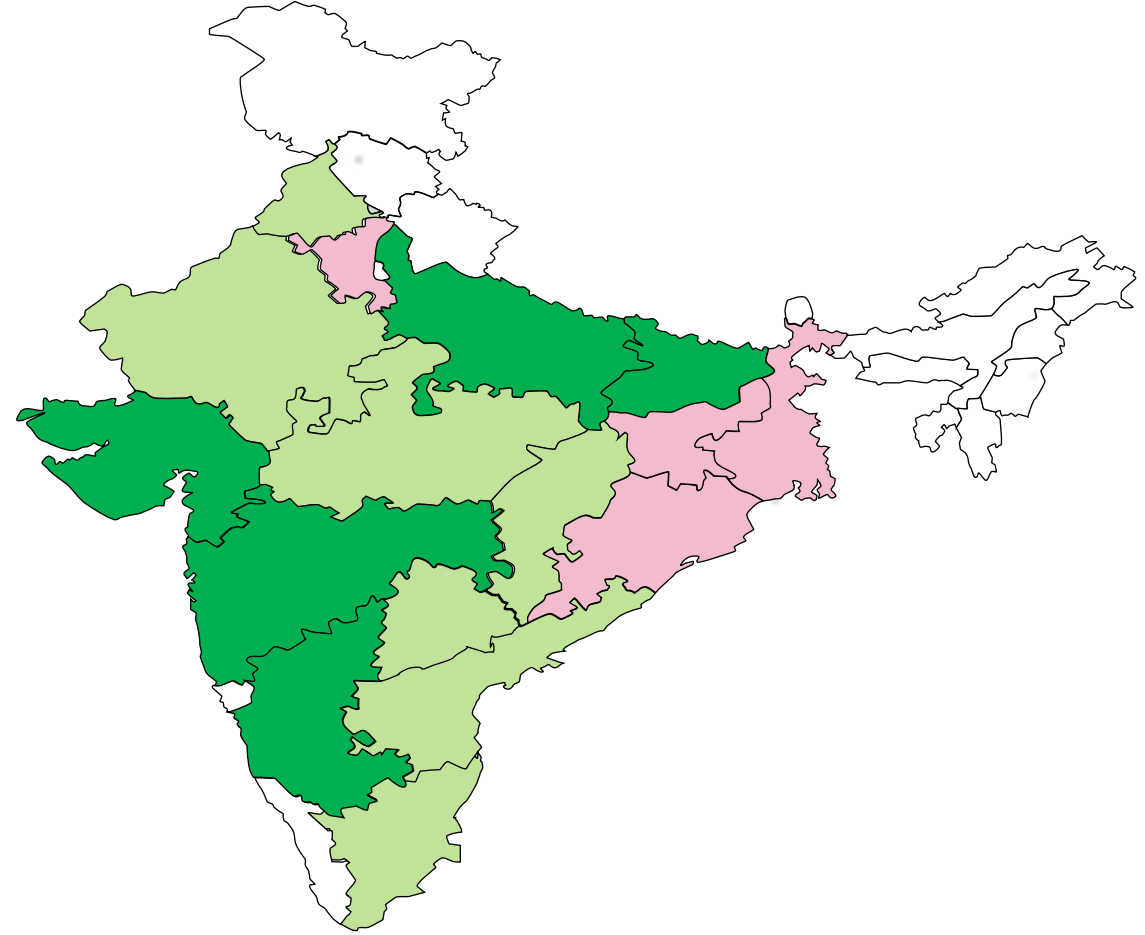
State wise Crop Value Index

Kharif CVI heat Map for FY23



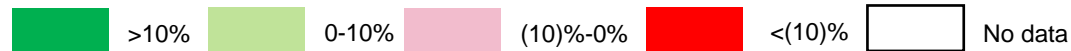
Source: CRISIL MI&A

Rabi CVI heat map for FY22



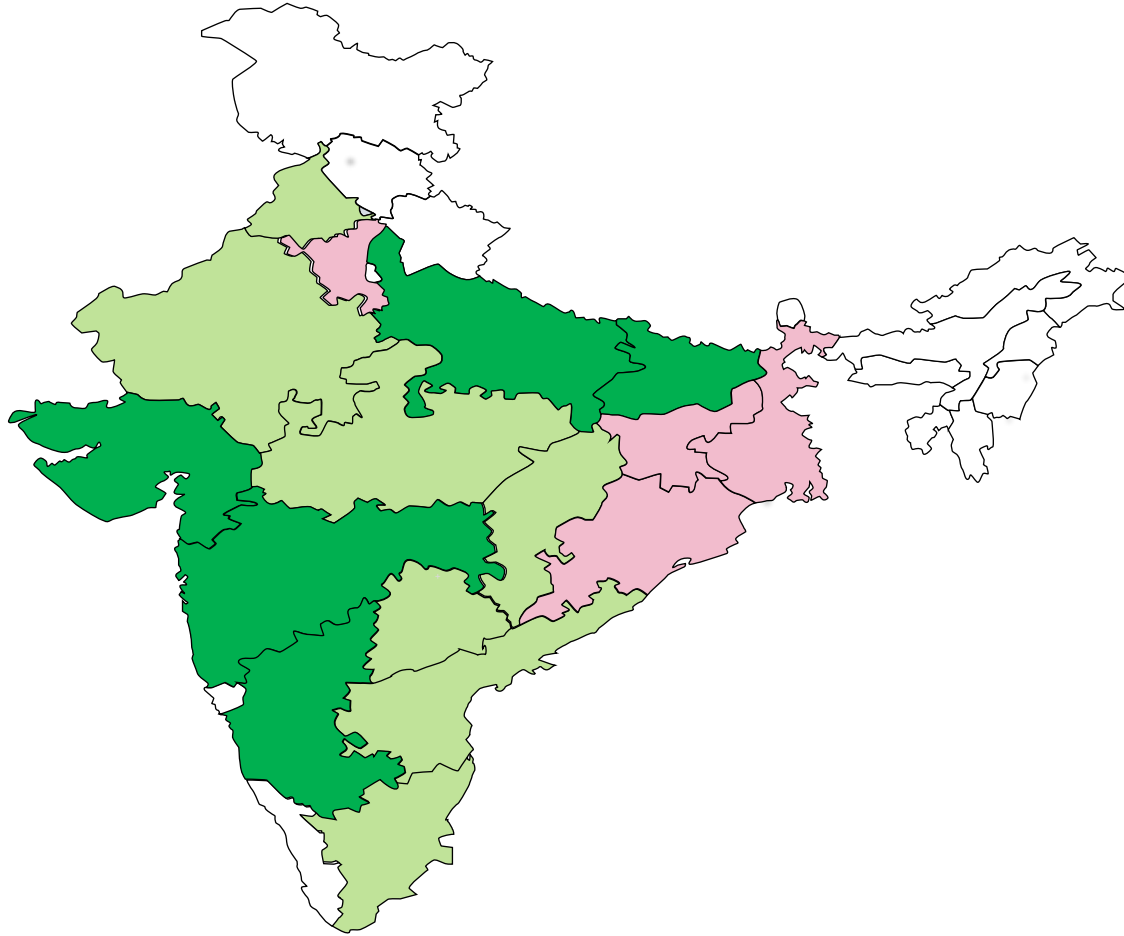
Source: CRISIL MI&A

Colours indicate % change on-year



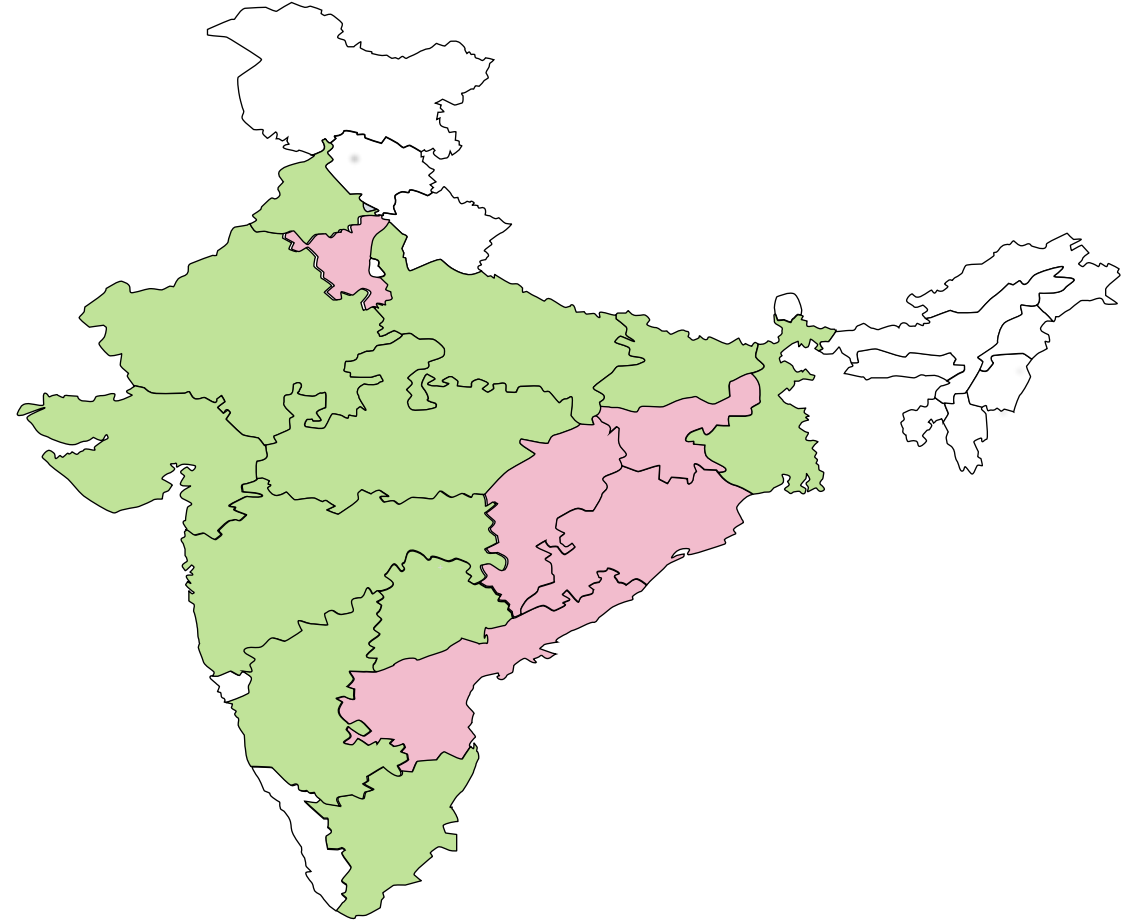
State-wise production and farm income expectation for the rabi season

Rabi CVI heat Map for FY23



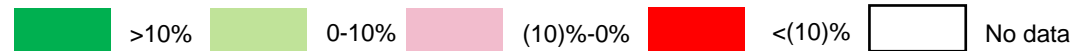
Source: CRISIL MI&A

Rabi Production for FY23



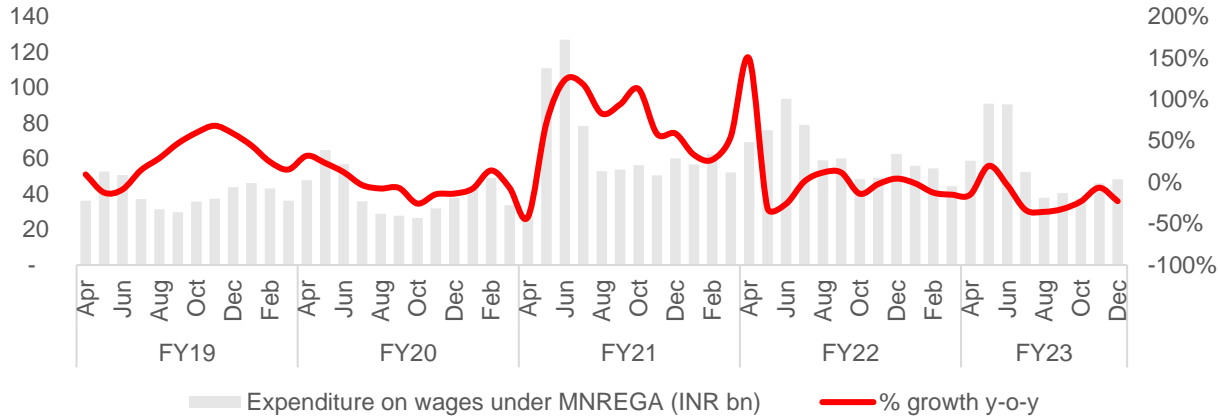
Source: CRISIL MI&A

Colours indicate % change on-year

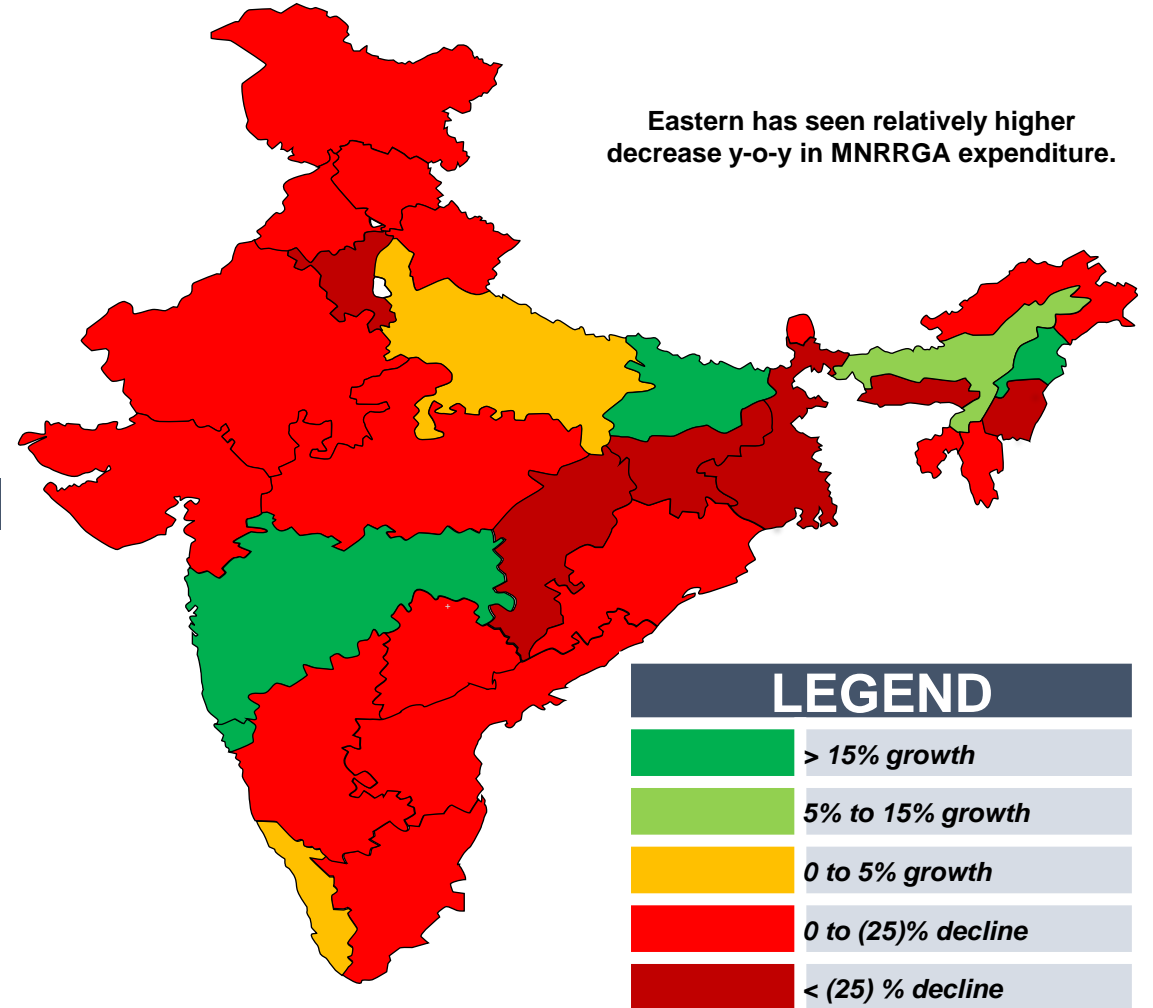


MNREGA scheme budget allocation tapered down in FY23

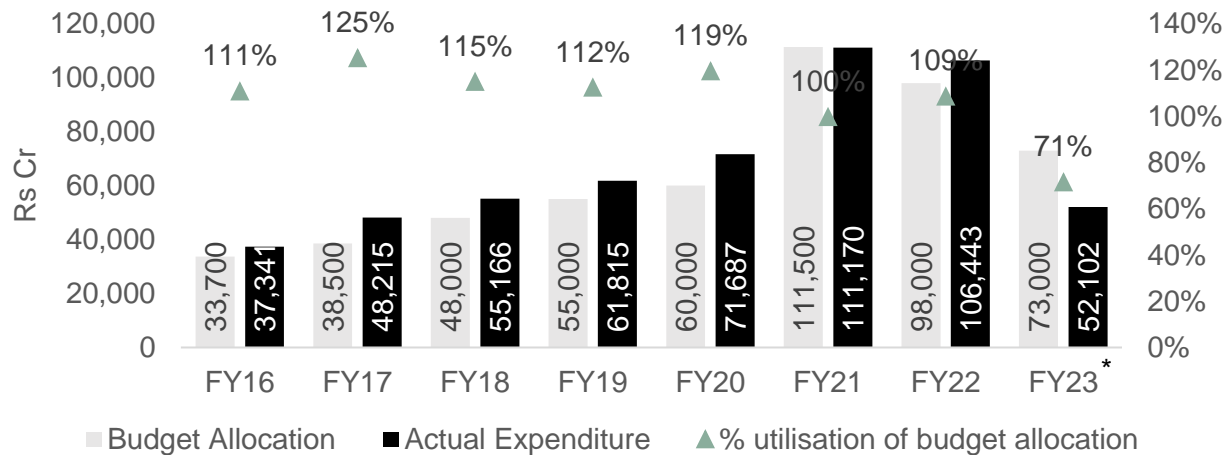
MNREGA wages growth



State wise growth in MNREGA wages expenditure for Apr-Dec FY23



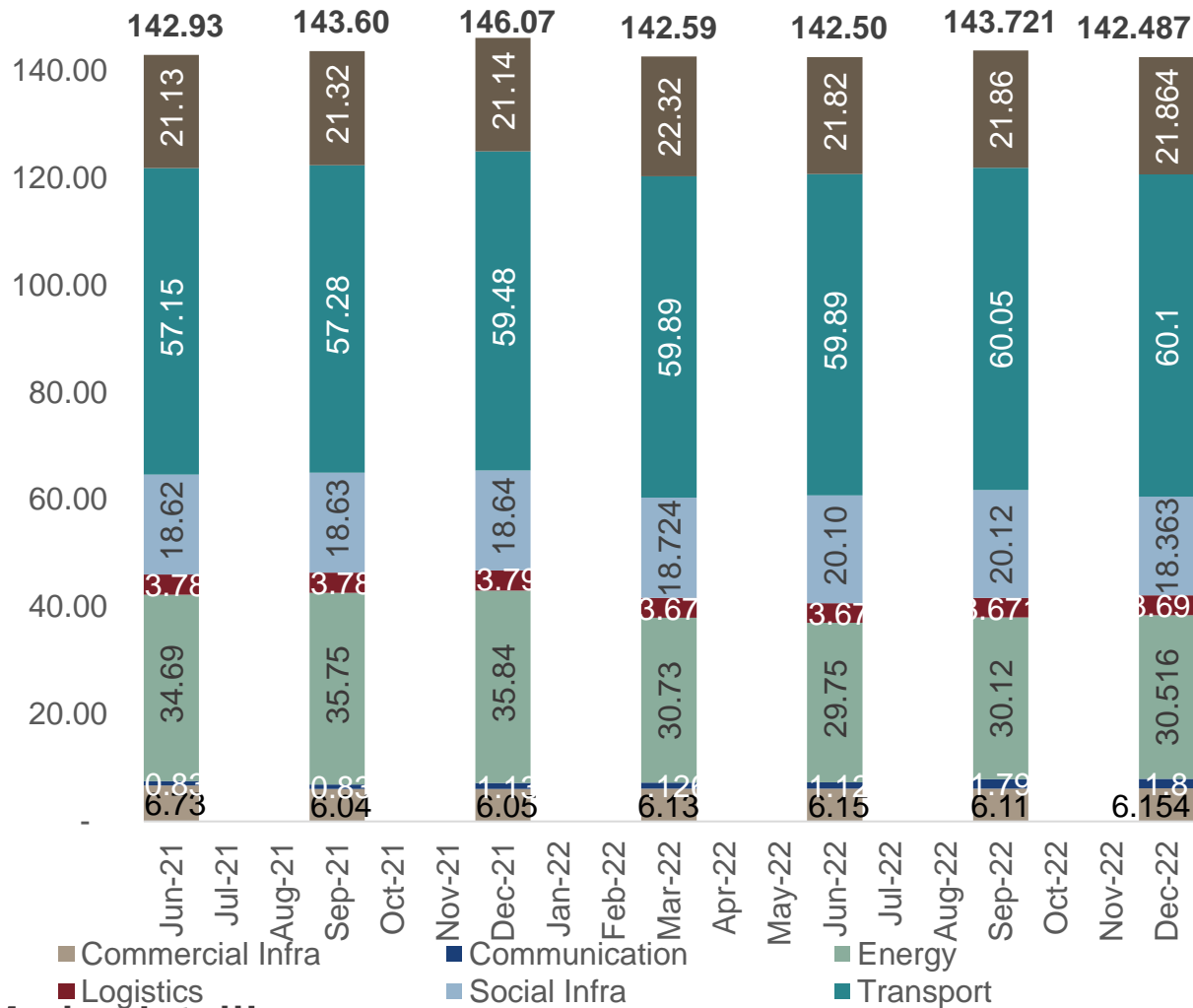
The MNREGA scheme has a history of overshooting budget



National Infrastructure pipeline

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

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



Sector wise stage wise value of projects (INR trillion)

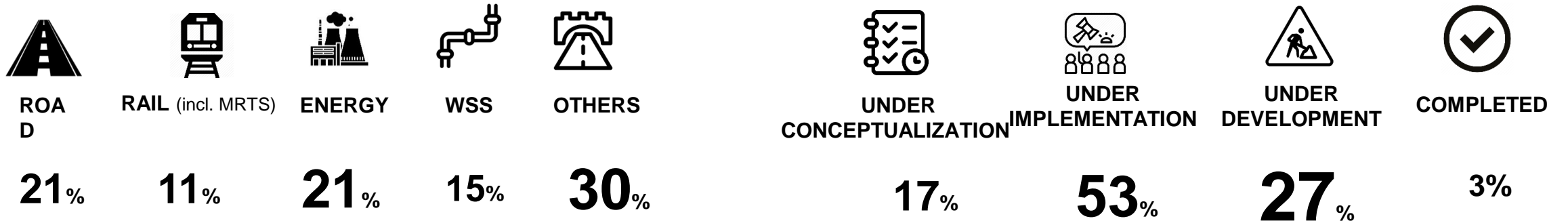
| Stage/Progress | Segment | Sep-21 | Dec-21 | Mar-22 | Jun-22 | Sep-22 | Dec-22 |
|--|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Completed | Transport | 0.32 | 1.28 | 1.36 | 1.64 | 1.88 | 1.90 |
| | Energy | 1.84 | 1.84 | 1.89 | 1.94 | 2.08 | 2.22 |
| | Water and Sanitation | 0.59 | 0.61 | 0.68 | 0.69 | 0.79 | 0.79 |
| | Commercial Infra | 0.03 | 0.04 | 0.10 | 0.11 | 0.17 | 0.18 |
| | Social Infra | 0.07 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 |
| | Logistics | 0.30 | 0.31 | 0.29 | 0.29 | 0.29 | 0.43 |
| | Communication | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Under Construction | Transport | 29.81 | 31.72 | 31.80 | 31.83 | 31.79 | 31.89 |
| | Energy | 7.90 | 10.10 | 9.58 | 9.50 | 9.66 | 10.18 |
| | Water and Sanitation | 11.61 | 11.61 | 12.13 | 12.13 | 12.10 | 12.13 |
| | Commercial Infra | 0.71 | 0.71 | 0.70 | 0.70 | 0.71 | 0.73 |
| | Social Infra | 15.23 | 15.24 | 15.24 | 17.01 | 17.21 | 15.70 |
| | Logistics | 2.69 | 2.69 | 2.76 | 2.76 | 2.76 | 2.64 |
| | Communication | 0.73 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Pre-construction & planning | Transport | 27.15 | 26.48 | 26.73 | 26.42 | 26.38 | 26.31 |
| | Energy | 26.01 | 23.90 | 19.26 | 18.31 | 18.38 | 18.12 |
| | Water and Sanitation | 9.12 | 8.92 | 9.51 | 9.00 | 8.97 | 8.94 |
| | Commercial Infra | 5.30 | 5.30 | 5.33 | 5.34 | 5.23 | 5.25 |
| | Social Infra | 3.33 | 3.33 | 3.40 | 3.00 | 2.82 | 2.55 |
| | Logistics | 0.79 | 0.79 | 0.62 | 0.62 | 0.62 | 0.62 |
| | Communication | 0.09 | 0.08 | 0.08 | 0.08 | 0.74 | 0.75 |
| Total Completed | | 3.16 | 4.16 | 4.41 | 4.76 | 5.32 | 5.65 |
| Total Under Construction | | 68.68 | 73.11 | 73.25 | 74.97 | 75.27 | 74.31 |
| Total Pre-construction & planning | | 71.8 | 68.80 | 64.93 | 62.77 | 63.14 | 62.53 |

Source: CRISIL MI&A, India Investment Grid
 Note: March-22 has seen dip in total project value compared to Dec-21 largely due to Energy sector

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

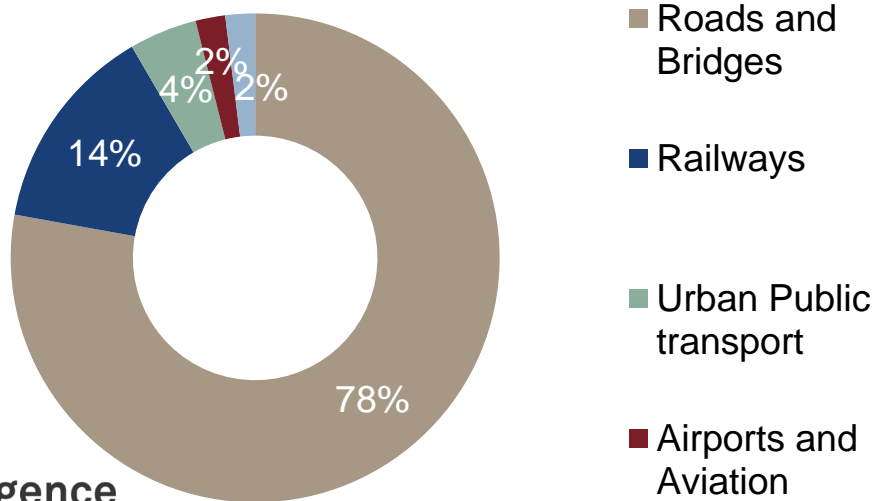
Transport, energy and water projects account for ~79% of NIP spending of Rs. 142.5 lakh crore

~Rs 31.89 lakh crore of projects currently under implementation

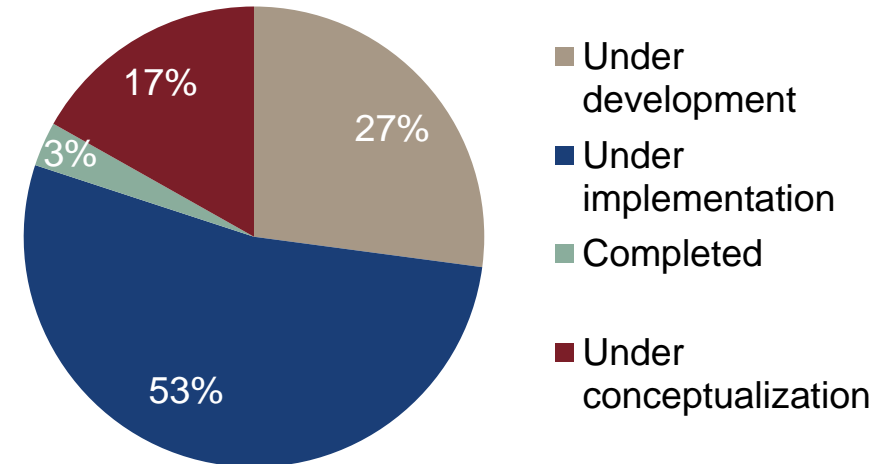


Roads account for ~77% of opportunity in the transport segment

Note: 1. All charts are for the period FY20-25
 2. Others include irrigation, rural infra, ports, airports, health, petroleum, natural gas, education, etc
 3. Updated as on 2nd Jan 2023



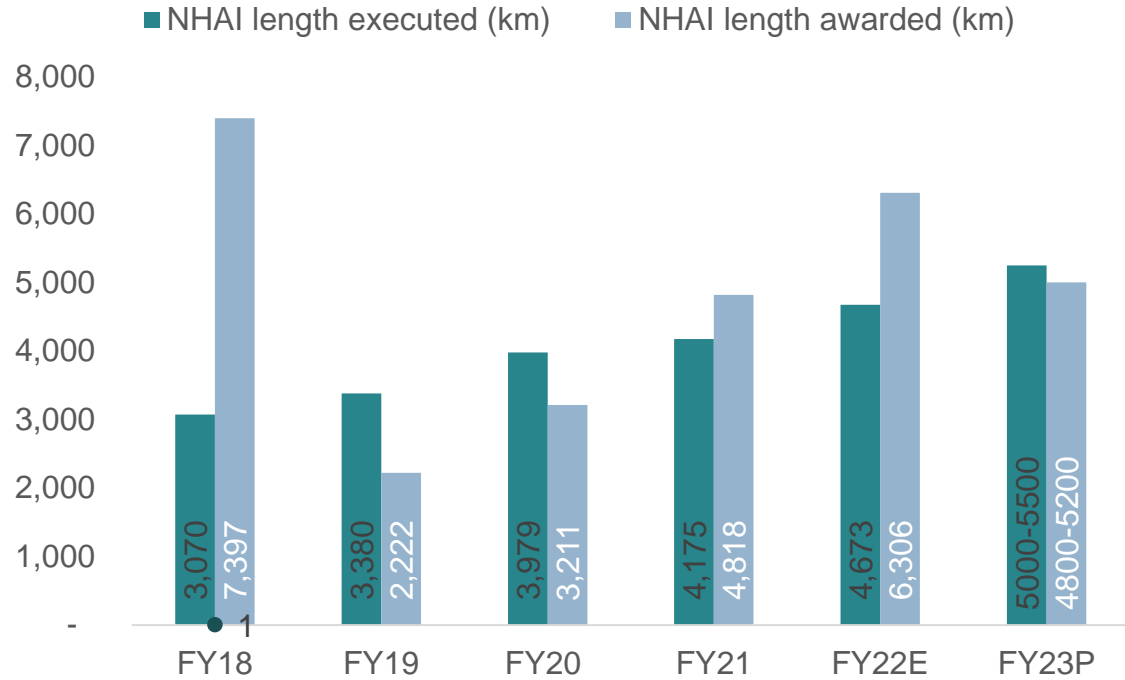
Around half of investments under transport segment are under Implementation



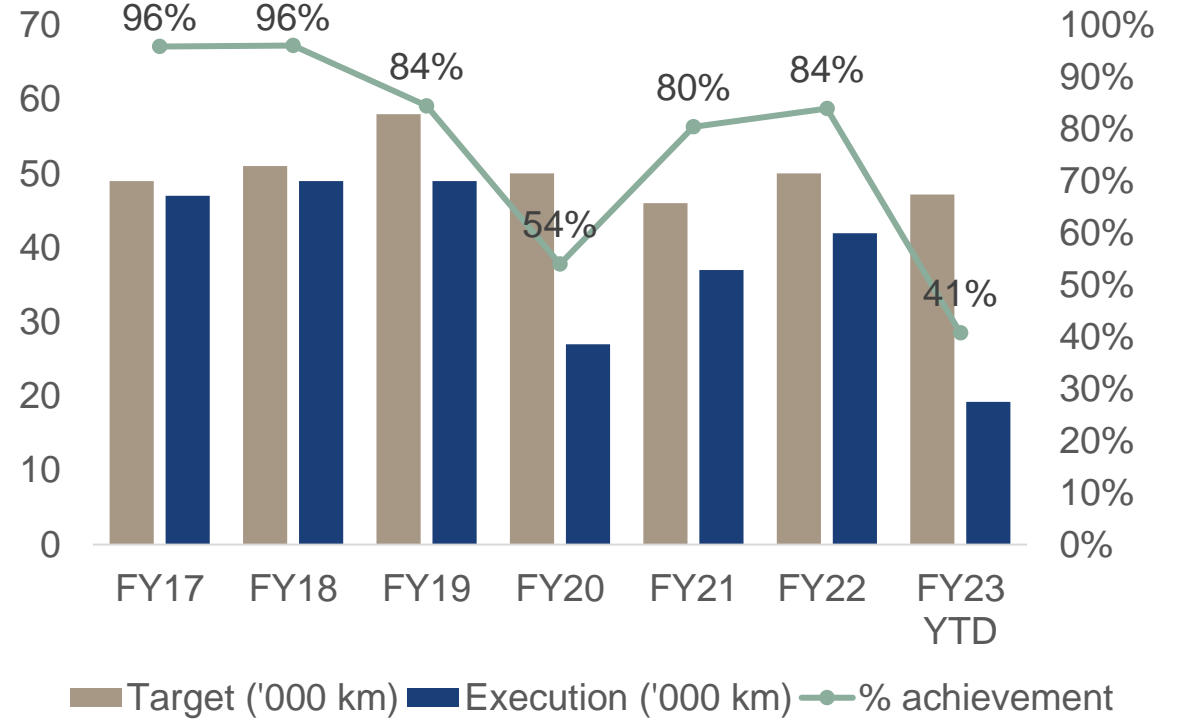
Focus on Road Infrastructure

Higher National Highway execution expected in FY23

National highways (NHA) – Awarded and executed



Trend in PMGSY target and execution

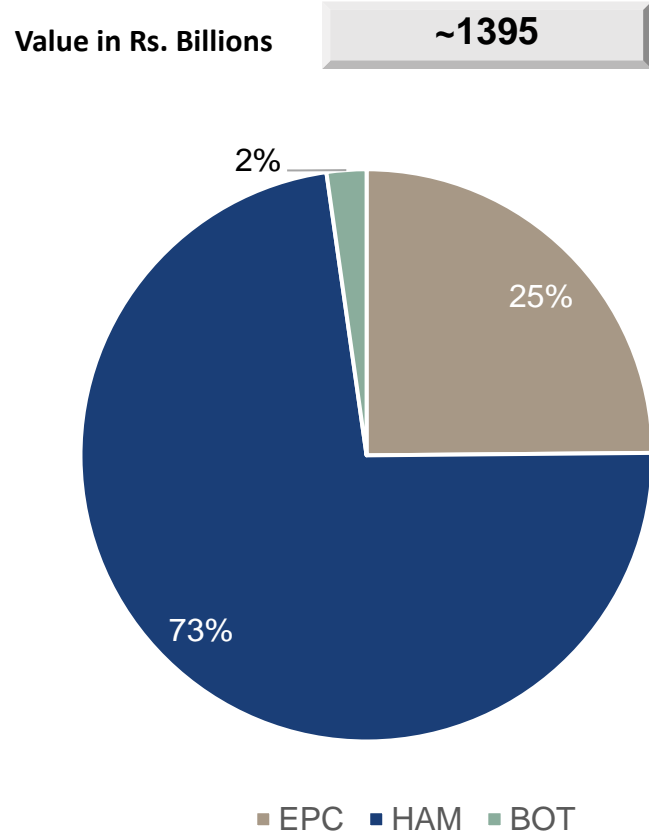


FY22 has seen strong awarding of road projects after two slow years
 NHA execution is expected to grow in FY23

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

NHAI tendering in Apr-Dec FY23

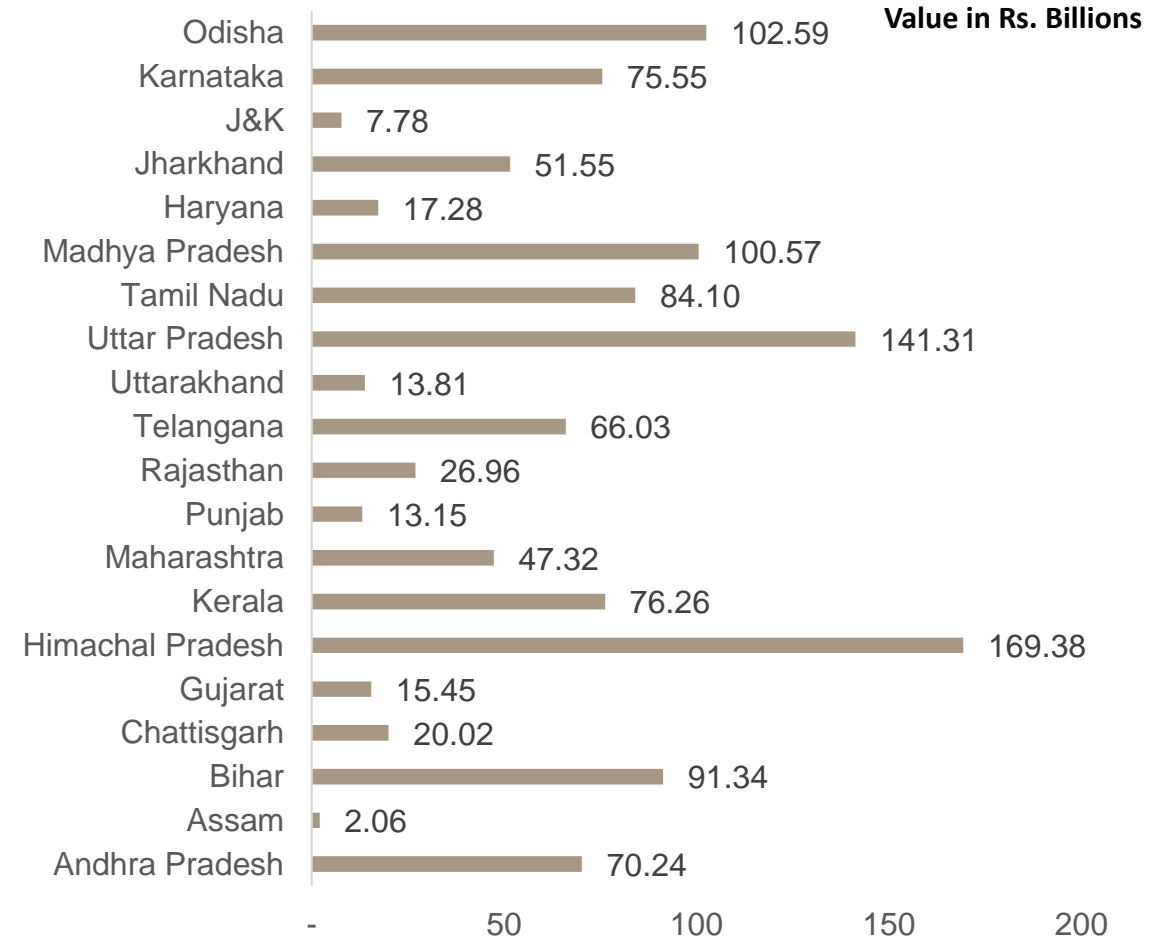
Total NHAI project value by mode type in Apr-Dec



*Total tender value consists of states mentioned herewith

Source: CRISIL MI&A

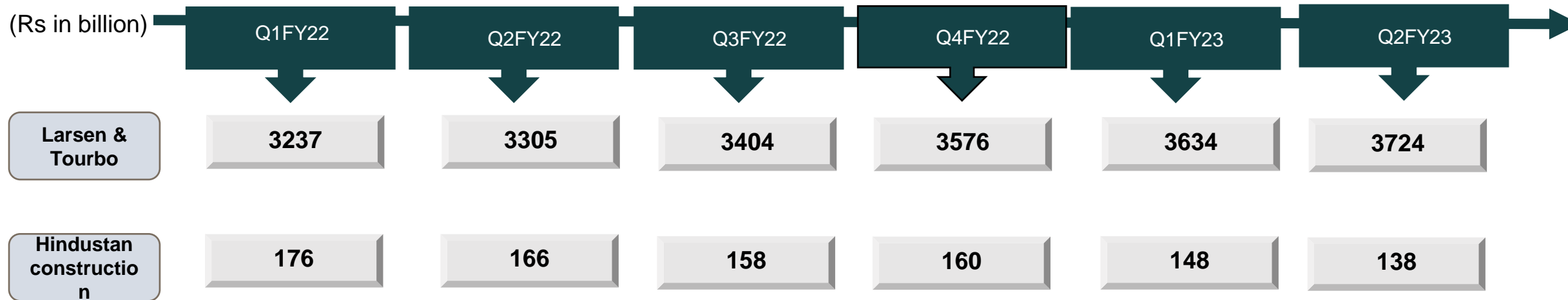
Tender project value in major states



Order books swelling at EPC firms amid high govt spending and swift economic rebound ^{Consulting}

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

(Rs in billion)



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

Indian automobile industry

Assumptions for forecast

- **No sizeable impact on production and supply chain due to resurgence of Covid**
- **Continued gradual improvement in production levels**
- **No disruption in OEM vehicle launch plans**
- **Elevated inflation levels, impact on consumer disposable incomes in the short term**
- **Global as well as domestic Economic scenario to remain under pressure**
- **Retail fuel prices to remain elevated**
- **Financing scenario to remain accommodative**
- **Retails of BSVI phase 1 to be allowed in FY24, restriction to be limited to production of BSVI phase 1 vehicles from 1 April 2023**
- **BSVI phase 2 vehicle inventory build up from Q4 FY23**

Domestic – Annual forecast

Consulting

| Segment | Volumes | | | | Y-o-y growth rate | | | |
|-----------------------|---------|------|-----------|-----------|-------------------|------|--------|--------|
| | FY21 | FY22 | FY23E | FY24P | FY21 | FY22 | FY23E | FY24P |
| PV (mn) | 2.7 | 3.1 | 3.7-3.9 | 3.8-4.0 | (2)% | 13% | 23-25% | 0-2% |
| Two Wheelers (mn) | 15.1 | 13.7 | 16.3-16.8 | 17.2-17.7 | (13)% | (9)% | 19-21% | 5-7% |
| CV ('000) | 566 | 731 | 970-990 | 1010-1020 | (21)% | 29% | 33-35% | 3-5% |
| Three Wheelers ('000) | 217 | 267 | 490-500 | 603-613 | (66)% | 23% | 83-85% | 22-24% |
| Tractors (mn) | 0.89 | 0.84 | 0.91-0.93 | 0.92-0.93 | 27% | (6)% | 8-10% | (1)-1% |

Numbers include EVs

Domestic – Long term forecast

| Segment | Volumes | | | | Y-o-y growth rate | | | |
|-----------------------|---------|------|------|-----------|-------------------|-------|-------|--------------|
| | FY20 | FY21 | FY22 | FY27P | FY20 | FY21 | FY22 | FY22-27 CAGR |
| PV (mn) | 2.8 | 2.7 | 3.1 | 5.0-5.2 | (18)% | (2)% | 13% | 10-12% |
| Two Wheelers* (mn) | 17.5 | 15.2 | 13.7 | 22-23 | (18)% | (13)% | (11)% | 9-11% |
| CV ('000) | 718 | 566 | 716 | 1250-1300 | (28)% | (21)% | 26% | 11-13% |
| Three Wheeler* ('000) | 639 | 217 | 260 | 760-770 | (9)% | (66)% | 20% | 23-25% |
| Tractors (mn) | 0.71 | 0.89 | 0.84 | 1.1-1.3 | (10)% | 27% | (6)% | 6-8% |

Numbers include EVs

Exports – Annual forecast

Consulting

| Segment | Subsegment | Volumes | | | | Y-o-y growth rate | | | |
|-----------------------|-----------------|-------------|-------------|------------------|-----------------|-------------------|------------|-------------------|-------------|
| | | FY21 | FY22 | FY23E | FY24P | FY21 | FY22 | FY23E | FY24P |
| PV (mn) | Cars | 0.26 | 0.37 | 0.39-0.41 | 0.41-0.44 | (44)% | 42% | 8-10% | 3-5% |
| | UV | 0.14 | 0.20 | 0.23-0.25 | 0.24-0.27 | (25)% | 45% | 19-21% | 5-7% |
| | Industry | 0.40 | 0.58 | 0.64-0.66 | 0.67-0.7 | (39)% | 43% | 12-14% | 4-6% |
| Two Wheelers (mn) | Motorcycle | 3.0 | 4.1 | 3.5-3.7 | 3.7-3.9 | (3)% | 34% | (13)-(11)% | 6-8% |
| | Scooter | 0.2 | 0.4 | 0.4-0.5 | 0.4-0.6 | (40)% | 23% | 20-22% | 6-8% |
| | Moped | 0.008 | 0.01 | 0-0.02 | 0-0.2 | (37)% | 51% | 68-70% | (21)-(19)% |
| | Industry | 3.3 | 4.4 | 3.9-4.1 | 4.2-4.4 | (7)% | 36% | (10)-(8)% | 6-8% |
| CV ('000) | LCV | 31.1 | 58.3 | 55-60 | 60-65 | (8)% | 87% | (1)-1% | 4-6% |
| | MHCV | 13.5 | 25.7 | 10-15 | 13-18 | (7)% | 90% | (52)-(47)% | 9-11% |
| | Buses | 5.7 | 8.3 | 10-15 | 10-15 | (53)% | (46)% | 43-48% | 9-11% |
| | Industry | 50.3 | 92.3 | 80-85 | 85-90 | (17)% | 83% | (11)-(9)% | 5-7% |
| Three Wheelers ('000) | GV | 5.6 | 10 | 6-8 | 7-9 | (12)% | 82% | (36)-(34)% | 7-9% |
| | PV | 387 | 490 | 395-495 | 420-430 | (22)% | 26% | (19)-(17)% | 5-7% |
| | Industry | 393 | 500 | 405-410 | 430-435 | (22)% | 27% | (19)-(17)% | 5-7% |
| Tractors ('000) | | 89 | 129 | 130-135 | 132-136 | 17% | 45% | 2-4% | 0-2% |

Inventory correction- in Q3 amidst healthy retail demand

| Vehicle segment | Normal inventory in days | Current inventory levels* | Inventory Units | Reasons |
|---------------------|--------------------------|---------------------------|------------------|---|
| Passenger Vehicles | ~30 | 30-35 | ~0.3 million | Amidst the healthy festive retails and moderated offtake during Q3, inventory levels have contracted to 30-35 days from 30-40 days at the end of Q2. |
| Two Wheelers | ~45 | 35-40 | ~1.7-1.9 million | Some normalization in the inventory with good festive retail demand while offtake was on a sliding trajectory. |
| Commercial Vehicles | ~30 | 20-25 | 58-63 thousand | Inventory levels came down for most of the segments in Q3 largely in the LCV segment. Tippers saw similar inventory levels as last quarter to cater the aggressive demand. Buses too have witnessed some inventory corrections in Vans and MHCV bus |
| Three Wheelers | 20-25 | 20-30 | 20-25 thousand | With improved retails and reduced offtake during Q3, inventory levels have come down to normal levels. |
| Tractors | ~35-40 | 45-50 | 130-150 thousand | Inventory levels have been high for past few month. However, players have undertaken some correction in November and December post festive. |

© 2022 CRISIL Ltd. All rights reserved.

Passenger vehicles

Post the record sales in FY23, industry growth pace to taper in FY24 from the high base of FY23

| Variables | FY21 | FY22 | FY23 E | FY24 P |
|-----------------------------------|------|------|--------|--------|
| Income for discretionary spending | NF | F | F | N |

| Variables | FY21 | FY22 | FY23 E | FY24 P |
|-----------------------|------|------|--------|--------|
| Cost of ownership | N | N | NF | NF |
| Petrol / CNG Vehicles | N | NF | NF | NF |
| Diesel vehicles | NF | NF | NF | NF |
| Interest rates | F | N | NF | NF |

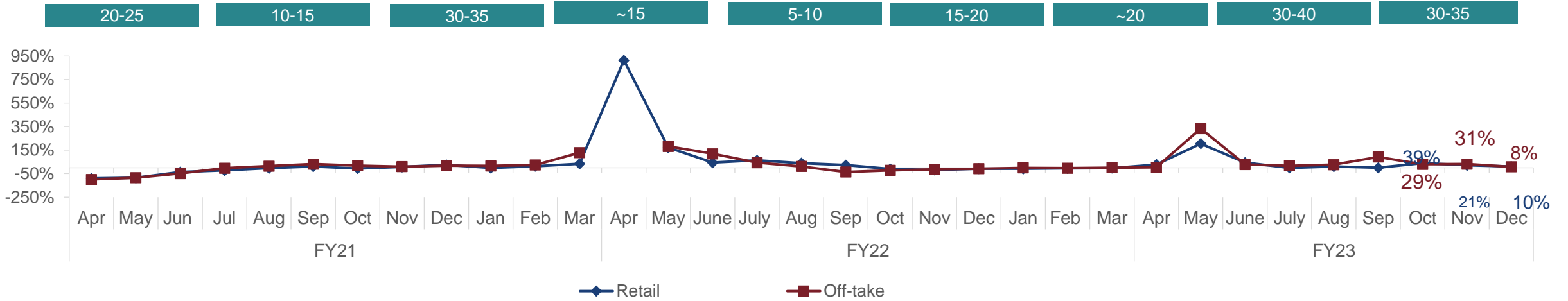
| Variables | FY21 | FY22 | FY23 E | FY24 P |
|----------------------------------|------|------|--------|--------|
| New model/ facelift launches | N | F | F | F |
| Regulations – passenger vehicles | NF | N | N | NF |

| Variables | FY21 | FY22 | FY23 E | FY24 P |
|---------------------------------------|-----------|----------|----------|----------|
| Vehicle Supply | NF | NF | N | F |
| Impact on Overall Sales Growth | NF | F | F | N |

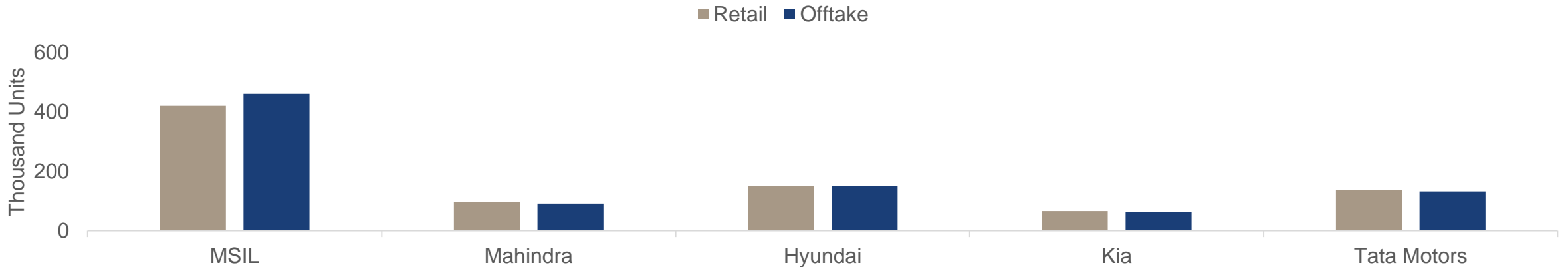
© 2022 CRISIL Ltd. All rights reserved.

Record retails, healthy offtake, some inventory correction during Q3

Oct-Nov Retails grew by more than a third on a y-o-y basis, tad slower growth in offtakes



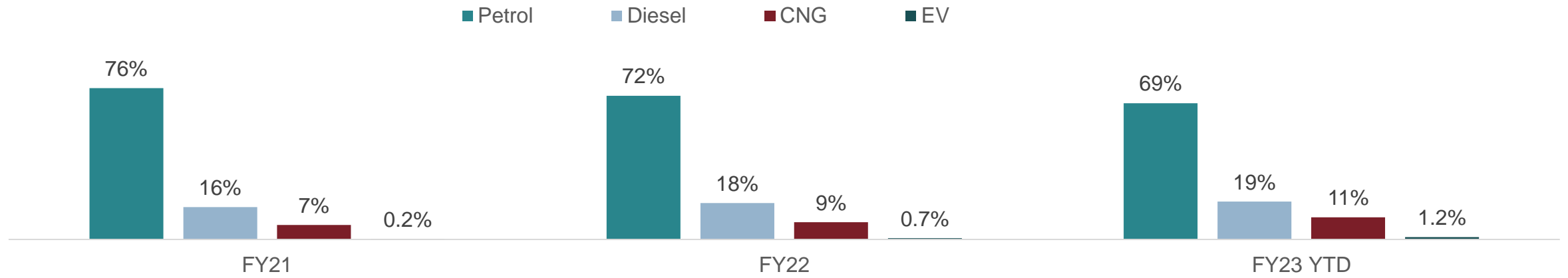
Offtake leads for market leader, comparable retails for Mahindra, Tata Motors



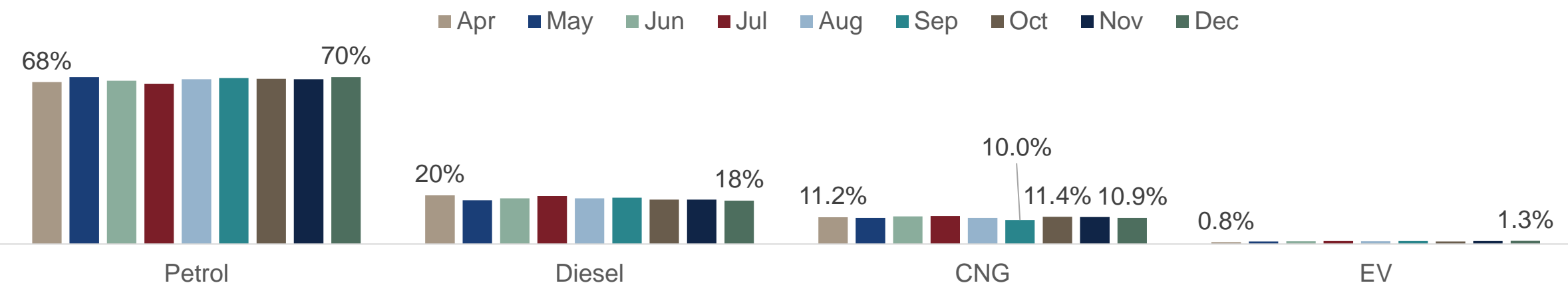
© 2022 CRISIL Ltd. All rights reserved.

Petrol lost some ground to Diesel & CNG; CNG share expected to remain steady in the medium term

Gradual improvement in CNG share despite hike in CNG retail price

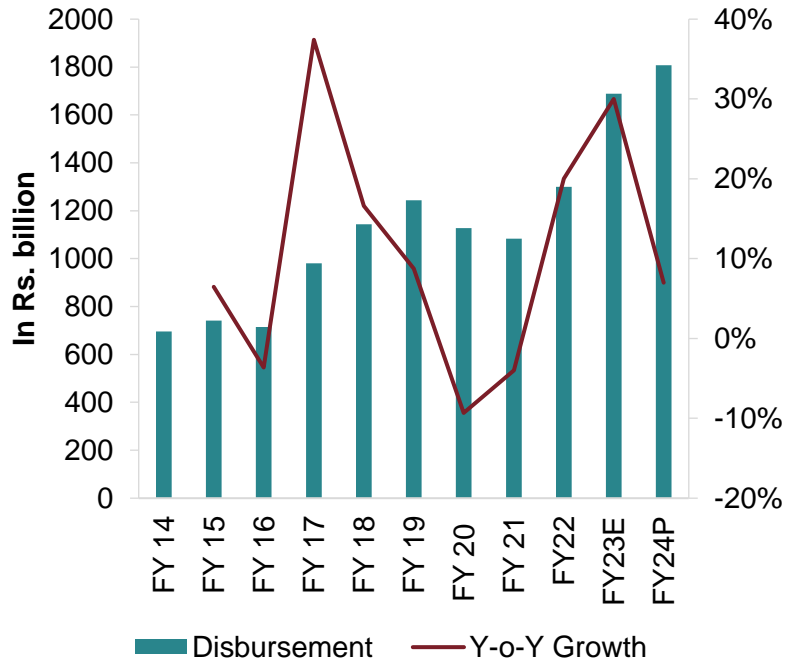


FY23 m-o-m trend: Sharp rise in CNG prices exerting pressure on CNG share, minor push during festive



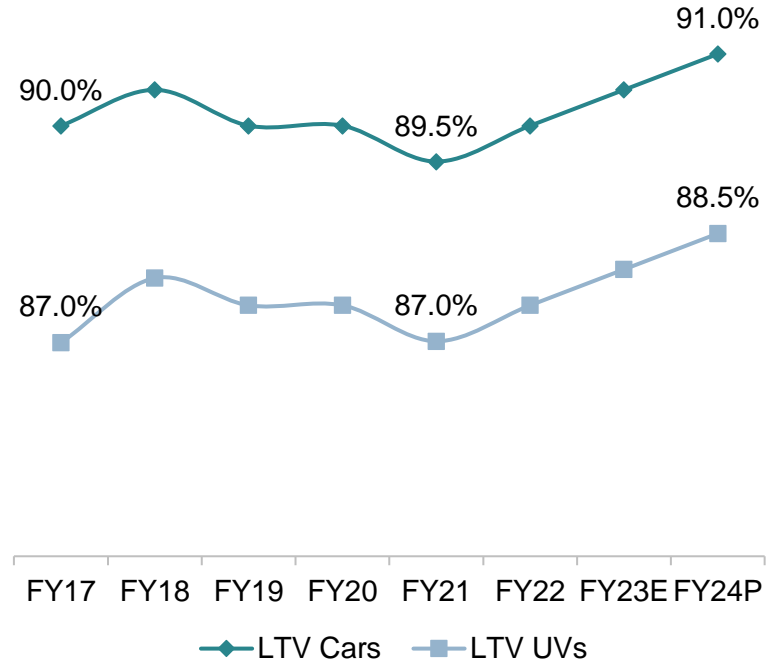
After a high growth in FY23, disbursement growth pace to taper down in FY24

Disbursement

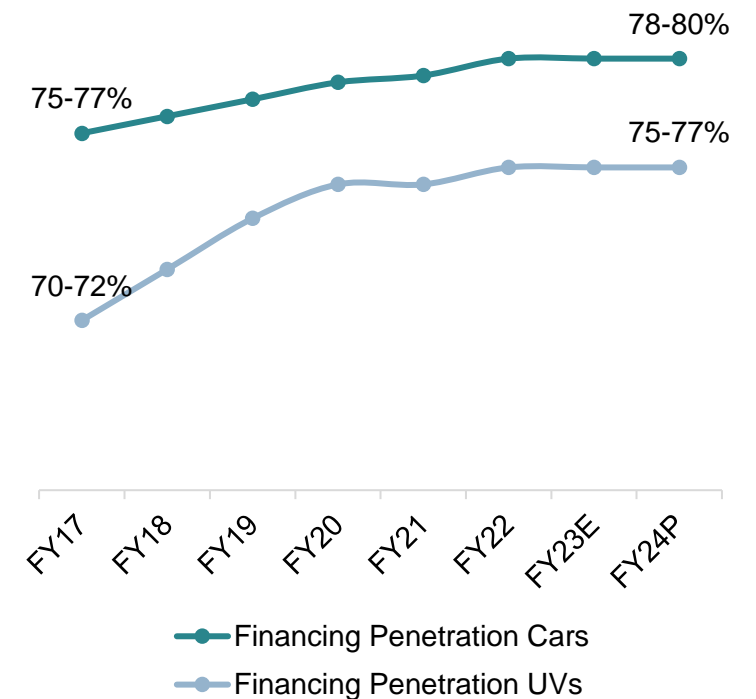


Source: Company Report, Industry, CRISIL MI&A

Loan-to-value (LTV)



Financing penetration

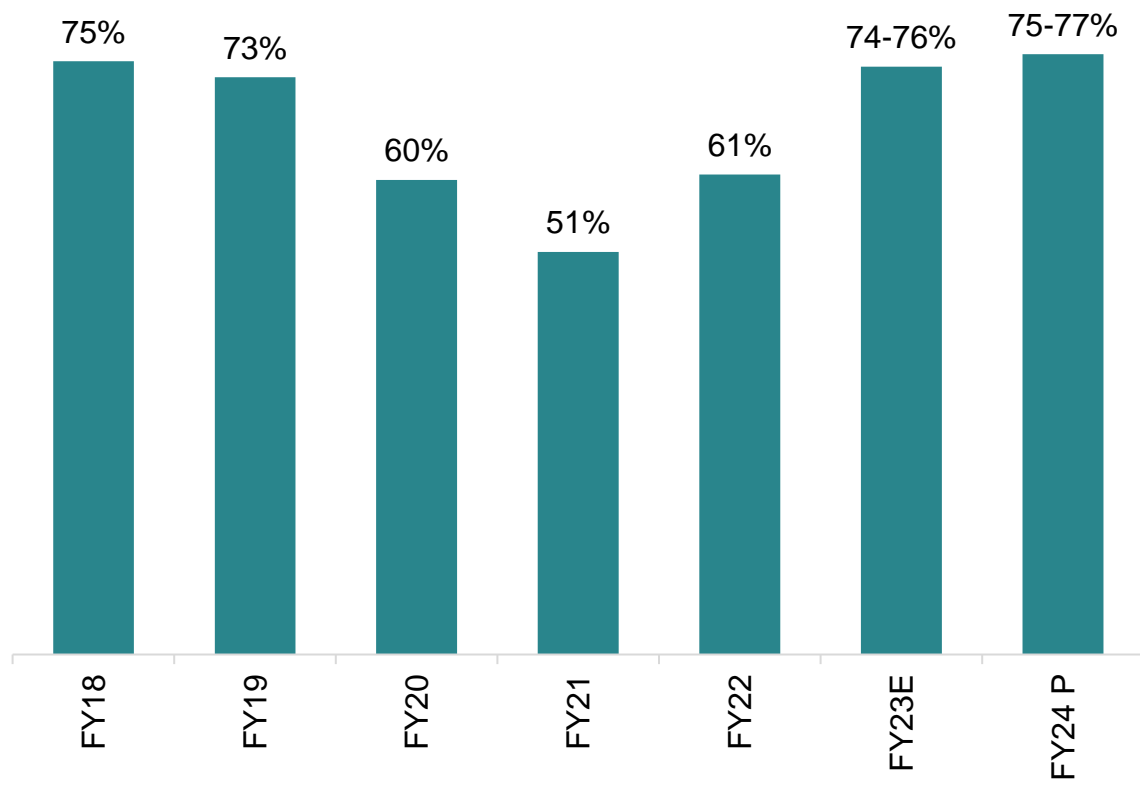


- From the low of fiscal 2021, disbursements have bounced back and are expected to achieve record numbers in fiscal 2023 in tandem with PV sales expectations
- 28-32% y-o-y rise is expected in the financial disbursements this year- 24-26% from the volume growth supported by 5-6% price hike
- In fiscal 24, disbursements are expected to rise 6-8% backed by expected rise in vehicle pricing. The volumes are expected to remain range bound.
- Price rise will be due to the phase 2/ airbags mandate coupled with annual price hike undertaken every year
- Financers remain accommodative of the PV industry
- Rising interest rates remain a concern

© 2022 CRISIL Ltd. All rights reserved.

Supply side improvement to back utilization in FY23, to remain rangebound in FY24

Utilization to reach pre Covid levels in FY23



Source: CRISIL MI&A Estimated

Capacity utilisation of key players

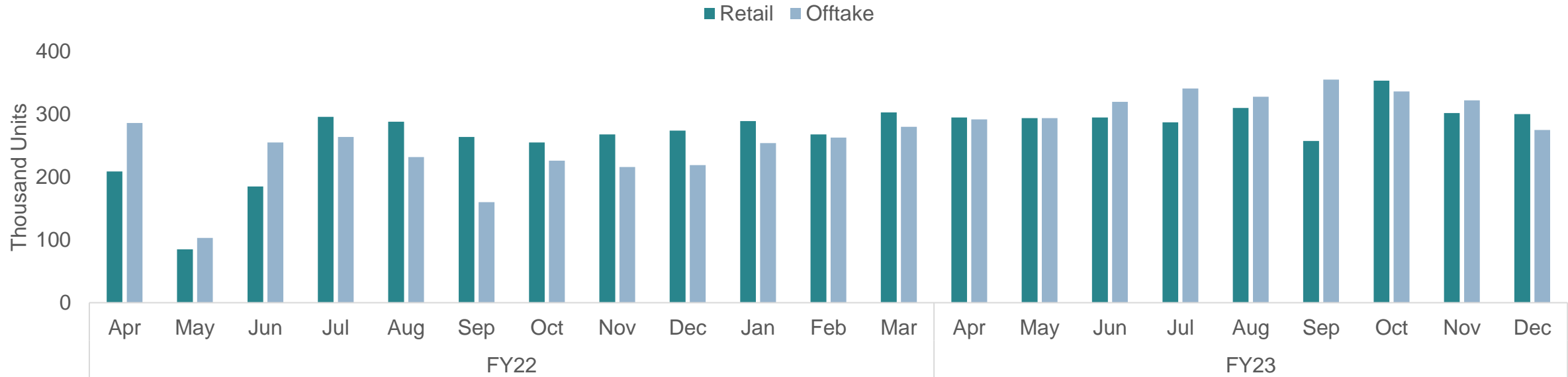
| Player | Effective Capacity (in '000) (on 31st Mar 2022) | Capacity utilisation in FY21 | Capacity Utilisation in FY22 | Capacity Utilisation in April-Nov FY23 |
|----------------|---|------------------------------|------------------------------|--|
| Maruti | 2,250 | 69% | 79% | 85% |
| Hyundai | 763 | 74% | 79% | 95% |
| Tata Motors E | 564 | 38% | 66% | 99% |
| Renault-Nissan | 480 | 30% | 39% | 46% |
| Toyota | 310 | 17% | 24% | 43% |
| Honda | 180 | 48% | 59% | 66% |
| Volkswagen | 179 | 28% | 43% | 33% |
| Kia Motors | 300 | 64% | 79% | 119% |

E: Estimated
Source: SIAM, Industry, CRISIL MI&A

© 2022 CRISIL Ltd. All rights reserved.

Healthy festive retails, inventory correction during December

3 lakh+ retails across months in Q3



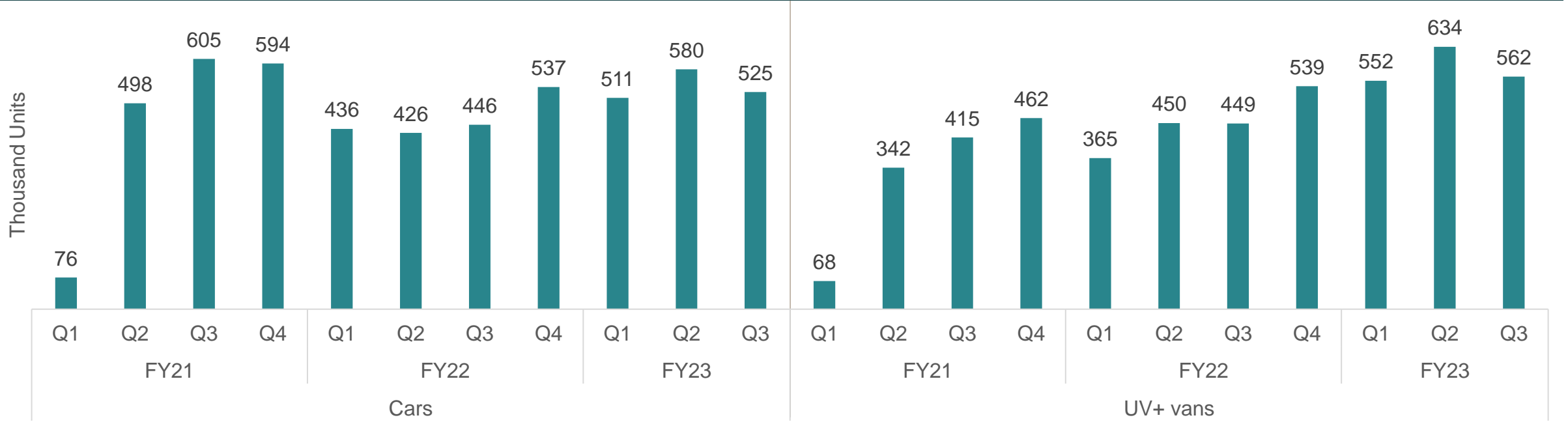
Note: Retail numbers are estimated, Offtake numbers include Tata Motors sales
 Source – MoRTH, SIAM, CRISIL MI&A

- Industry witnessed healthy sales- retail as well as offtake, Inventory built up continued even in October
- OE push especially for the basic hatchback segment continued even in November
- Although there was m-o-m contraction (from a high base) in retails during Nov, still industry clocked 3lakh+ retails during Nov
- December saw some inventory correction with continued healthy retails while 15% m-o-m drop in offtake
- High discounts provided a kicker to retails during December
- Dealer inventory levels came down from 35-40 days in September end to 30-35 days during December

© 2022 CRISIL Ltd. All rights reserved.

Some moderation in production during Q3 from high base of Q2

Quarterly production trend



Source: SIAM, CRISIL MI&A

- With easing of supply chain issues as well as strong demand, production reached record high levels in Q2 especially for UVs
- This high production was to cater to the inventory built up for the expected healthy festive demand
- On this high base, production moderated in Q3 amidst the inventory correction by OEMs
- Despite the moderation witnessed on a q-o-q levels, overall production clocked 21% growth on a y-o-y basis
- Growth in UVs was faster at 25% vis a vis 18% y-o-y growth witnessed in cars

Domestic – Annual forecast

| | Units | Passenger cars | UVs & vans | Total | EV penetration |
|---------------------|----------|----------------|------------|----------------|----------------|
| FY21 | Millions | 1.54 | 1.17 | 2.71 | 0% |
| <i>y-o-y growth</i> | % | -9% | 9% | -2% | |
| FY22 | Millions | 1.47 | 1.60 | 3.06 | 0.5% |
| <i>y-o-y growth</i> | % | -5% | 37% | 13% | |
| FY23E | Millions | 1.6-1.8 | 2.0-2.2 | 3.7-3.9 | 1-2% |
| <i>y-o-y growth</i> | % | 15-17% | 30-32% | 23-25% | |
| FY24P | Millions | 1.7-1.8 | 2.1-2.2 | 3.8-4.0 | 3-4% |
| <i>y-o-y growth</i> | % | 0-1% | 1-2% | 0-2% | |

Source – SIAM, CRISIL MI&A

Domestic – Quarterly forecast

Consulting

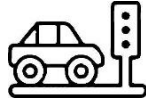
| Fiscal | Quarter | Passenger cars | | UVs & vans | | Total | |
|--------|---------|----------------|--------------|---------------|--------------|---------------|--------------|
| | | Sales ('000) | y-o-y growth | Sales ('000) | y-o-y growth | Sales ('000) | y-o-y growth |
| FY22 | Q1 | 336 | 348% | 309 | 317% | 649 | 335% |
| | Q2 | 344 | (21)% | 396 | 32% | 740 | 0% |
| | Q3 | 349 | (32)% | 411 | 9% | 760 | (15)% |
| | Q4 | 437 | (15)% | 482 | 15% | 919 | (1)% |
| FY23 E | Q1 | 398 | 19% | 509 | 65% | 908 | 40% |
| | Q2 | 470 | 37% | 554 | 40% | 1,025 | 38% |
| | Q3 | 420 | 20% | 514 | 25% | 934 | 23% |
| | Q4 E | 410-420 | (6)-(4)% | 515-525 | 6-8% | 930-940 | 1-3% |
| FY24 P | Q1 P | 380-390 | (4)-(2)% | 490-500 | (4)-(2)% | 875-885 | (4)-(2)% |
| | Q2 P | 435-445 | (7)-(5)% | 530-540 | (4)-(2)% | 975-985 | (5)-(3)% |
| | Q3 P | 440-450 | 5-7% | 545-555 | 6-8% | 990-1000 | 6-8% |
| | Q4 P | 440-450 | 6-8% | 540-550 | 4-6% | 985-995 | 5-7% |

Source – SIAM, CRISIL MI&A

- Q2 offtake reached a record high of million+ volumes amidst the improvement in production as well as OE push especially for small cars segment
- Moreover, the inventory built up for the festive season backed the offtake growth in Q2; at the end of Q2 dealer inventory were above normal at 30-40 days
- Q3 saw healthy retails amidst the festive demand as well as push in December with high discounts & price hikes from Jan
- Some inventory correction was done by OEMs during Q3, & dealer inventory reached 30-35 days by Q3 end
- Q4 offtake is expected to remain range bound, as OEMs clear the BSVI phase 1 inventory
- Inventory built up for BSVI phase 2 is expected to start from March and continue in Q1 FY24
- For the complete year FY23, a record high growth of 24-26% is estimated. On this high base, some moderation is expected in FY24.
- Industry offtake is expected to clock 0-2% growth
- UV segment will provide the necessary push while demand for cars is estimated to remain range bound

Stakeholder interactions

OEMs



- Definite improvement in supply situation
- Still the production has not completely normalized
- Current Covid situation may aggravate the production scenario going ahead
- All OEMs have reduced dependence on few suppliers and have employed alternate sources
- Price hike expected in January, April-BSVI phase 2 and Oct- mandatory airbags
- Domestic demand is relatively price inelastic except for the basic hatchback segment
- Record high dispatches expected in the current fiscal
- From this high base, next year sales are expected to remain range bound
- Some improvement in global economic scenario expected in the second half of next fiscal
- Election year to provide an added boost in the next fiscal

Dealer



- Encouraging festive retail
- Good traction continued during November as well
- Although retails moderated from Oct levels, still improved numbers compared to general post festive demand
- Some moderation in retail demand in Dec after 2 consecutive months of healthy retail
- Record high discounts in December , expected to continue in January
- 2-3% price hike from January
- Some retail boost expected in the last week amidst price hike and high discounts
- Gradual improvement in vehicle supply from OEMs
- Some correction in dealer targets during Nov/Dec- helping dealers prioritize their orders
- Slow moving models primarily in dealer stock
- Popular models still warrant waiting period
- Some moderation in waiting periods
- Booking pipeline has reduced
- Pace of fresh bookings has slowed down
- No communication from OEMs regarding the dispatch of BSVI phase 2 models
- Expected to receive the same from March

Financier



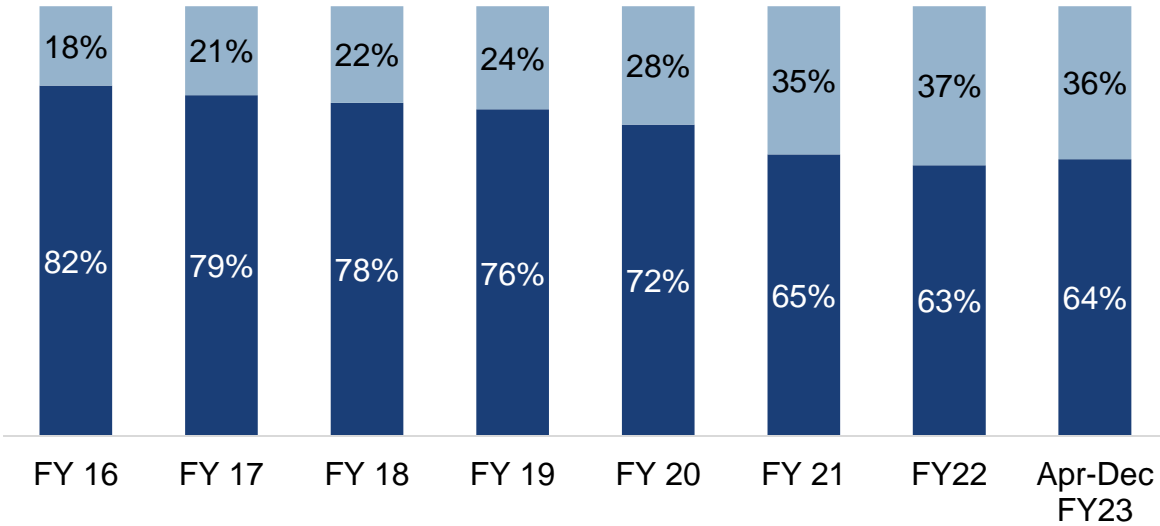
- High retail traction in the market is backing the disbursement growth
- Interest rates have been hiked in line with the hike in repo rates during December
- LTV and penetration levels remain steady
- No sizeable impact of rate hike seen on disbursement during Q3
- Stance from financiers remains accommodative
- Some increase in caution going ahead if the economic indicators remain negative

PV exports

Exports to expand further from the high base of FY22

Exports push for cars

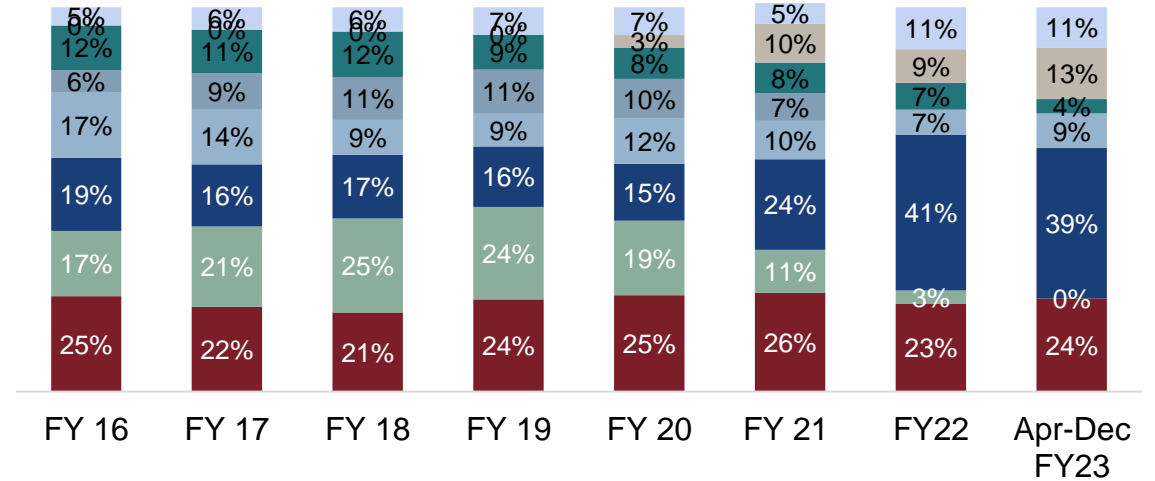
■ Cars ■ Uvs



Source: SIAM, CRISIL MI&A

MSIL maintains its export focus

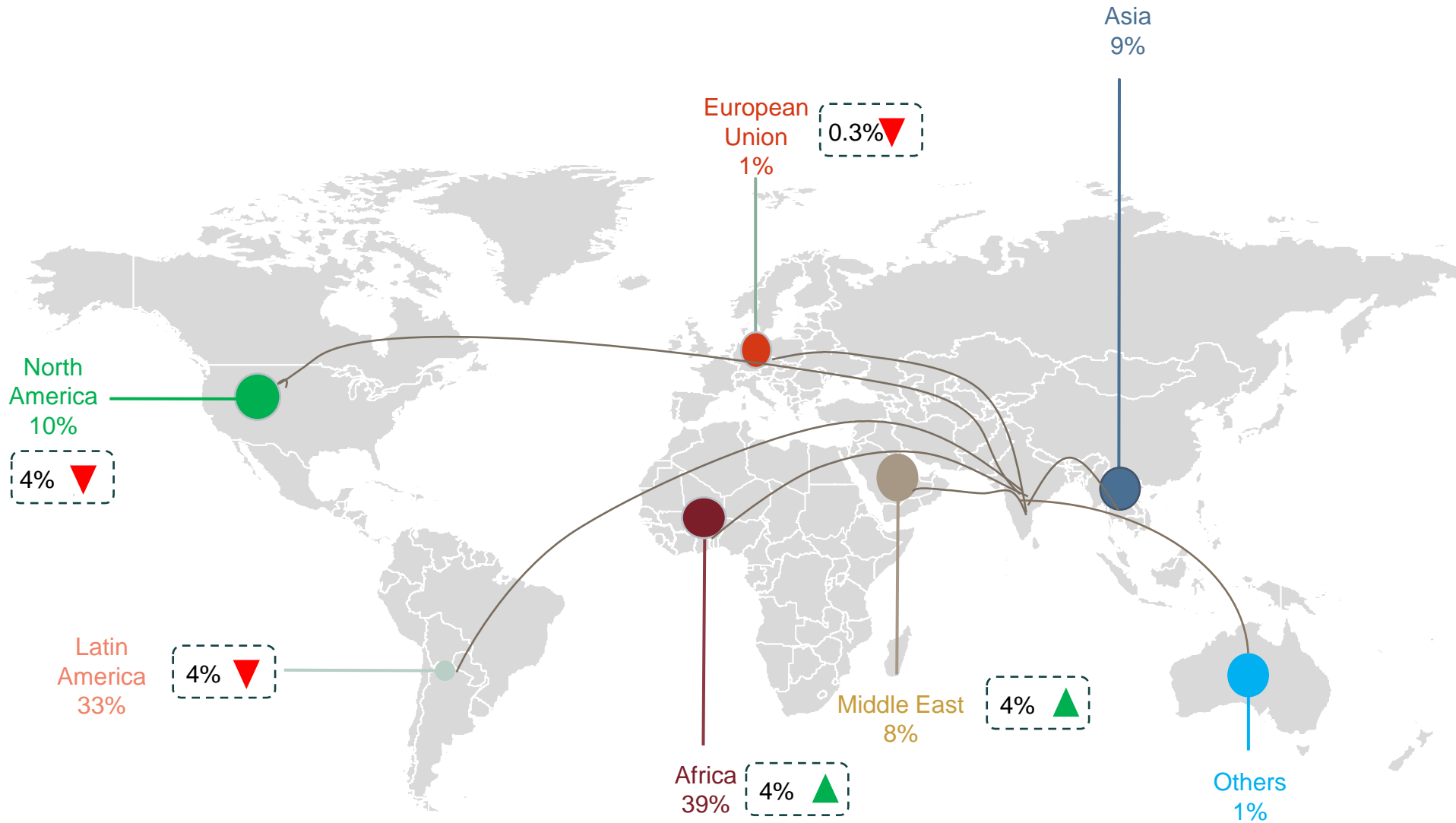
■ Hyundai ■ Ford ■ Maruti ■ Nissan ■ GM ■ Volkswagen ■ Kia ■ Others



- Amidst the increased traction for UVs in the domestic market, share of cars in exports market rose during FY23
- During FY23 Maruti continued to dominate the exports as well
- Kia has fast gained ground even in the exports space with Seltos and Sonet
- Third highest contributor to domestic sales, Tata Motors has low presence in the exports market
- Industry clocked ~16% growth in Apr- Dec FY23 and for the complete year exports are expected to reach near pre Covid levels

© 2022 CRISIL Ltd. All rights reserved.

Passenger Vehicle Exports



- During FY23, PV exports increased further during Apr-Nov period
- Africa continued to dominate the exports and extended its lead during the year
- This growth was led by the increased exports to South Africa
- South Africa emerged as the leading contributor to Indian exports
- While some contraction in exports to second largest export destination Mexico limited the exports to LATAM region
- Continued drop in exports to US exerted pressure on North American exports

Two-wheelers

After the recovery in FY23, pace to slacken in FY24

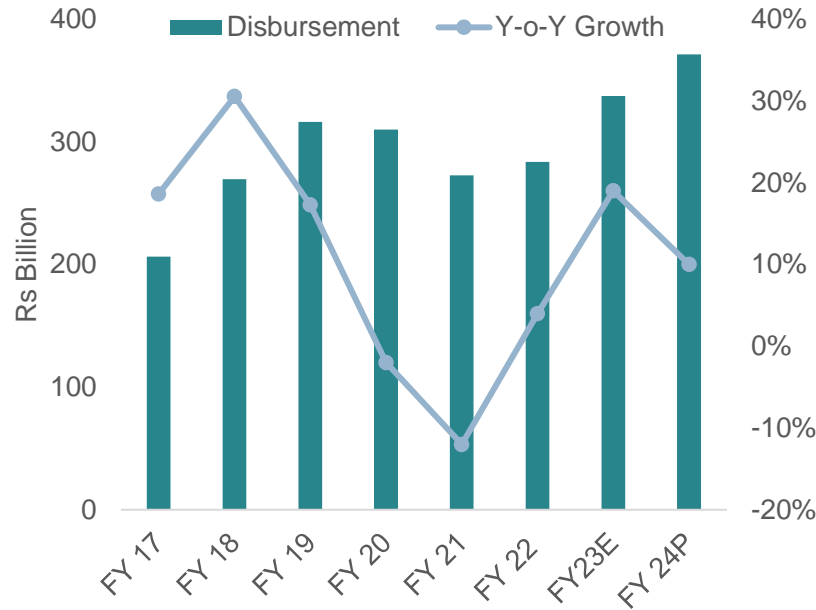
| Variables | FY21 | FY22 | FY23 E | FY24 P |
|---------------------------------------|-----------|-----------|----------|----------|
| Income for discretionary spending | NF | N | F | N |
| Variables | FY21 | FY22 | FY23 E | FY24 P |
| Cost of ownership | N | N | N | N |
| Interest rates | F | N | NF | NF |
| Variables | FY21 | FY22 | FY23 E | FY24 P |
| New model/ facelift launches | N | F | F | F |
| Regulations – two-wheeler vehicles | NF | N | N | N |
| Impact on Overall Sales Growth | NF | NF | F | N |

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

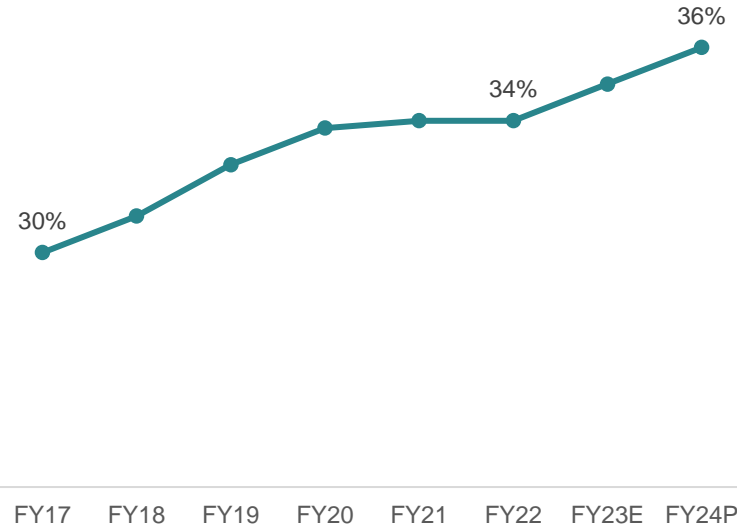
© 2022 CRISIL Ltd. All rights reserved.

Disbursements to improve further in FY24, albeit at a slower pace

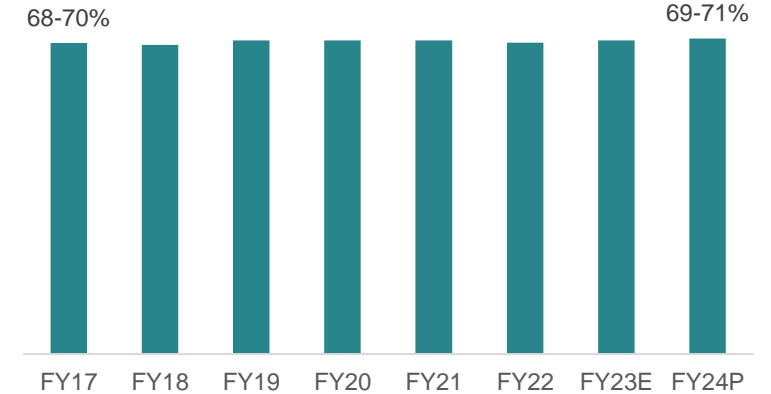
Disbursements



Auto finance penetration



Loan-to-value



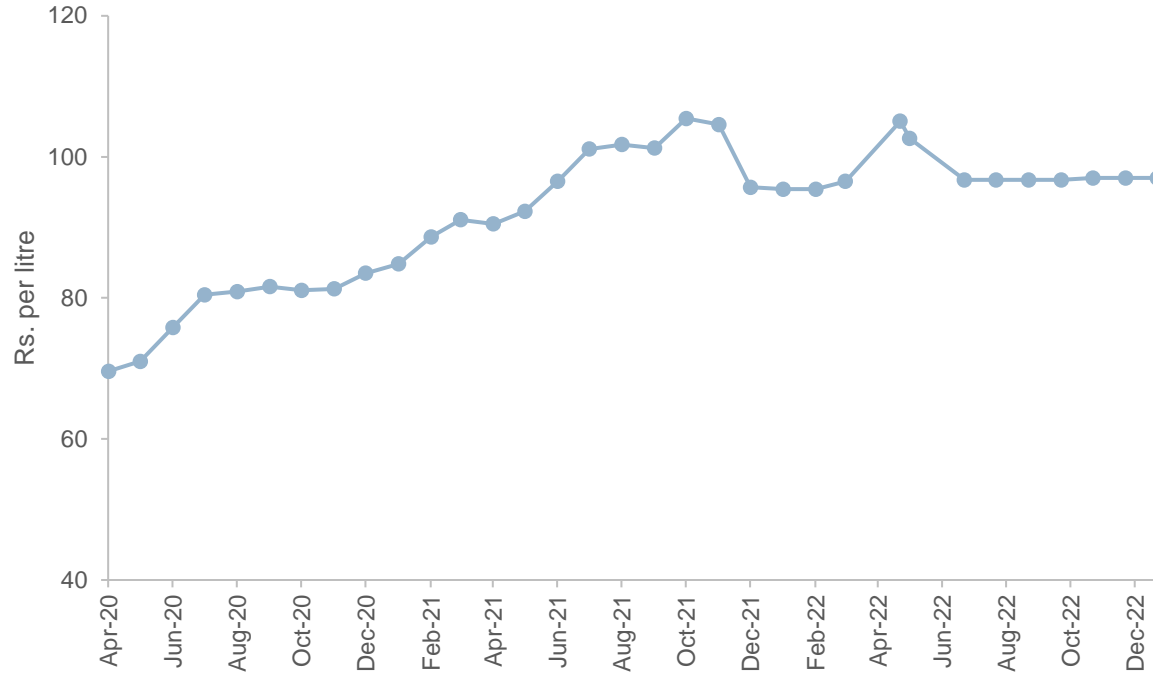
Source: Experian Credit Bureau, Company Reports, CRISIL MI&A

- Disbursements rebounded in FY23 after the subdued levels witnessed during the Corona period
- The improvement was on the back of improvement in vehicle sales as well as the price hikes undertaken. Moreover, there was some improvement in the penetration as financiers became more accommodative with reopening of economy
- The disbursement growth is expected to continue in FY24, although at a subdued pace given the tapered vehicle sales growth expected next year
- Penetration improvement is expected to continue in FY24, as financiers remain positive about the segment
- LTVs are expected to remain rangebound

© 2022 CRISIL Ltd. All rights reserved.

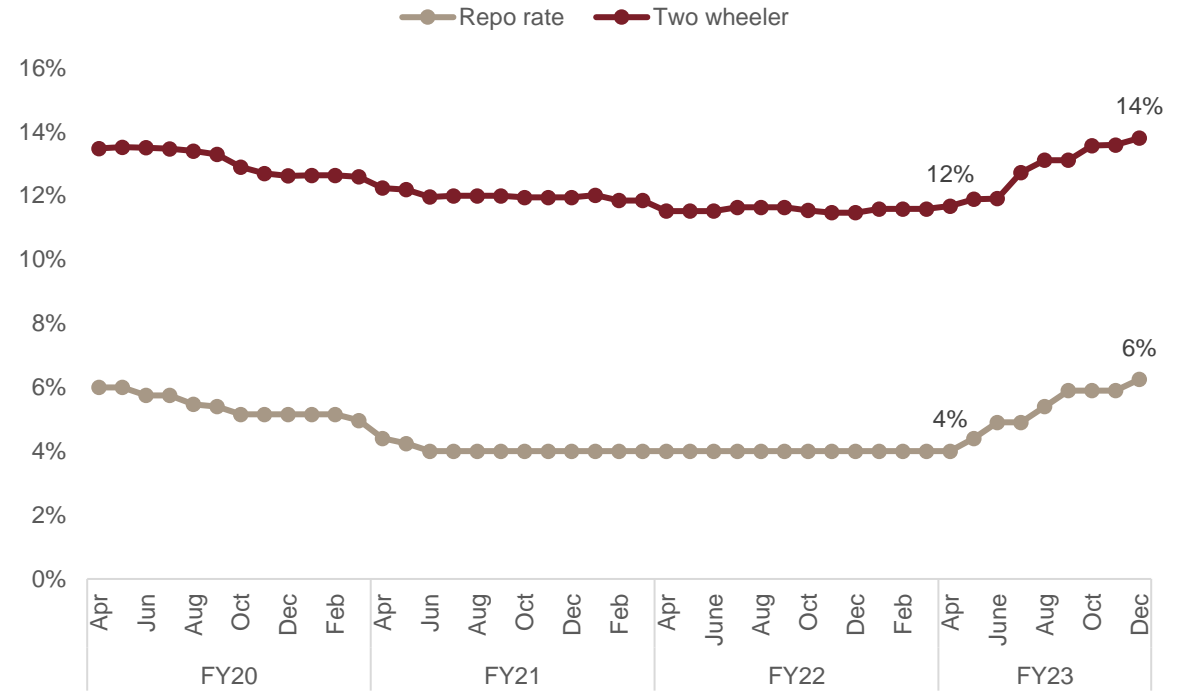
Fuel costs remain elevated, interest rates on the rise

Petrol Prices: Remained rangebound in the last quarter



Note: Fuel prices in Delhi region
Source: Industry, CRISIL MI&A

Interest Rates mimicking the repo trend

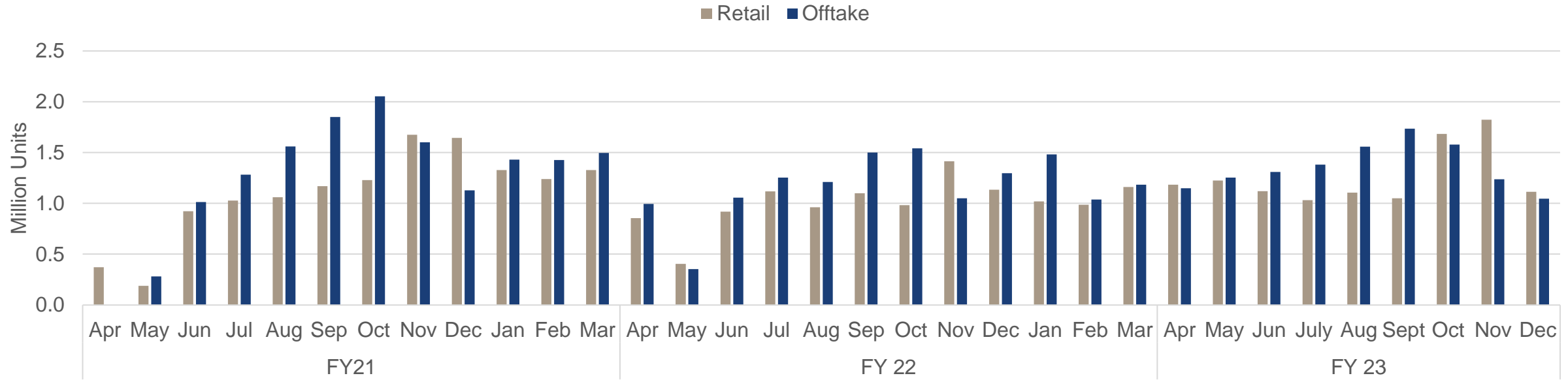


NOTE - Interest rates are an indicative rates charged by Banks
Source – CRISIL MI&A

- Fuel prices after being stagnant for about three months from Dec-Feb, spiked to Rs. 105 in Apr 22 owing to rise in worldwide crude oil prices. It has now settled in the range from Rs. 96 to Rs.97
- Interest rates have been hiked by more than 200 bps in tandem with 225 bps rise in repo rates
- Rising operating costs remain a concern for the industry

Healthy festive retail, inventory correction during Q3

Retail vs off-take sales trend



In million units

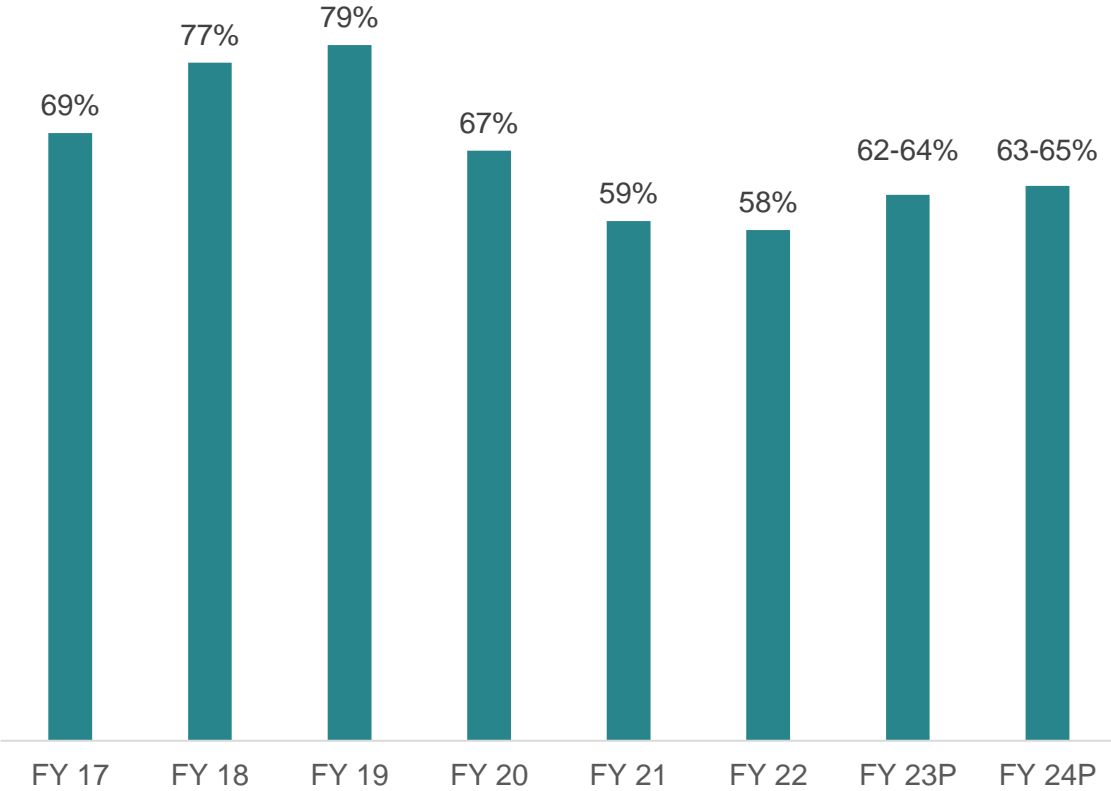
Note: Retail numbers are estimated

Source – MoRTH, SIAM, CRISIL MI&A

- Festive inventory built up backed offtake growth in Q2, while retail sales remained subdued
- In turn, retails witnessed healthy growth during Q3 (46% q-o-q, 30% y-o-y), offtake were on a sliding trajectory as OEMs undertook inventory correction.
- Dealer inventory levels normalized to 35-40 days by the end of Q3

Further moderate improvement in utilization expected in FY24

Utilisation rates to jump to pre-COVID levels



Player wise utilization

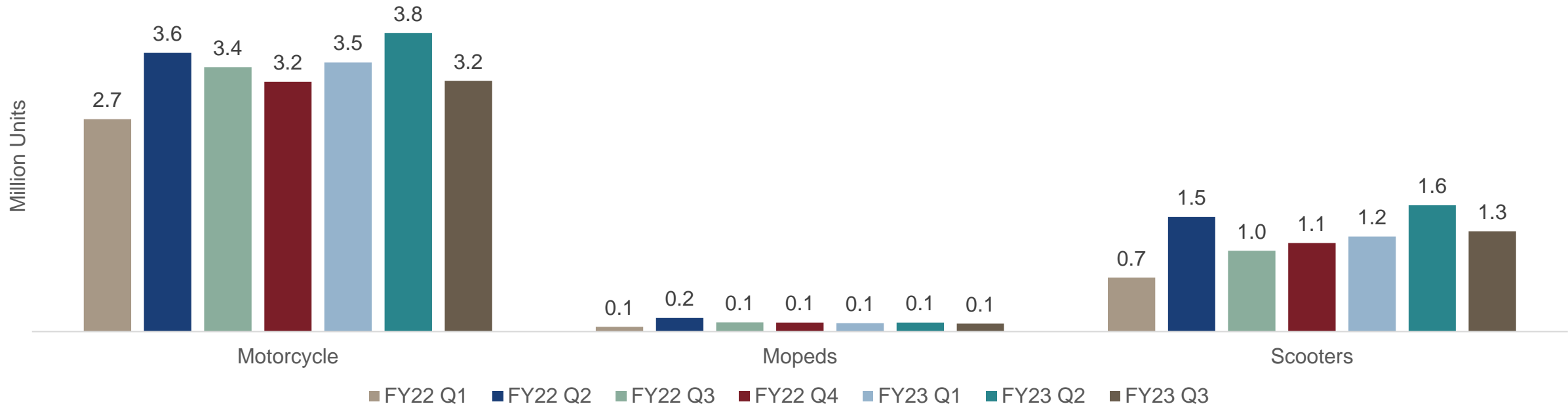
| Player | Effective Capacity estimate in mn (as on 31st Mar 2022) | Production Apr-Dec FY23 | Utilization |
|---------------------|---|-------------------------|-------------|
| Hero Motocorp | 9.6 | 4.0 | 56% |
| Bajaj Auto | 5.72 | 2.7 | 63% |
| HMSI | 6.4 | 3.6 | 74% |
| TVS Motor Company | 4.5 | 2.7 | 79% |
| India Yamaha Motors | 1.6 | 0.7 | 56% |
| Suzuki Motors | 1.25 | 0.7 | 72% |
| Royal Enfield | 0.95 | 0.6 | 88% |
| Piaggio Vehicles | 0.15 | 0.0 | 43% |
| Industry Total | 31.13 | 15.1 | 65% |

© 2022 CRISIL Ltd. All rights reserved.

SOURCE: Industry, SIAM, CRISIL MI&A

After a festive high of Q2, production normalizes in Q3

Segment wise production trend: Steeper contraction for scooters during Q3



Source: SIAM, CRISIL MI&A

- Backed by increased offtake demand and normalization in supply, production improved on a q-o-q basis for all the segments during Q2
- Production dropped 17% during Q3 in line with the domestic offtake, Some inventory correction was done during the quarter
- Scooters witnessed a steeper contraction at 21% while motorcycles production dropped 16%
- Although on a low base of FY22, scooter production increased 24% on a y-o-y basis during Q3 FY23

Domestic – Annual forecast

| | Units | Motorcycle | Scooters | Mopeds | Total | EV penetration |
|---------------------|----------|------------|----------|-----------|-----------|----------------|
| FY21 | Millions | 10.0 | 4.5 | 0.6 | 15.1 | 0% |
| <i>y-o-y growth</i> | % | (11)% | (20)% | (3)% | (13)% | |
| FY22 | Millions | 9.0 | 4.3 | 0.5 | 13.7 | 2% |
| <i>y-o-y growth</i> | % | (10)% | (6)% | (23)% | (9)% | |
| FY23E | Millions | 9.9-10.4 | 5.5-6 | 0.4-0.6 | 16.3-16.8 | 4-6% |
| <i>y-o-y growth</i> | % | 13-15% | 36-38% | (10)-(8)% | 19-21% | |
| FY24P | Millions | 10.8-11.3 | 5.8-6.3 | 0.4-0.6 | 17.2-17.7 | 6-8% |
| <i>y-o-y growth</i> | % | 7-9% | 1-3% | (3)-(1)% | 5-7% | |

Note: Numbers include EVs
Source – SIAM, CRISIL MI&A

Domestic – Quarterly forecast

Consulting

| Fiscal | Quarter | Motorcycle | | Scooter | | Moped | | Total | |
|--------|---------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|
| | | Sales (mn) | y-o-y growth | Sales (mn) | y-o-y growth | Sales (mn) | y-o-y growth | Sales (mn) | y-o-y growth |
| FY22 | Q1 | 1.7 | 93% | 0.6 | 85% | 0.1 | 28% | 2.4 | 88% |
| | Q2 | 2.6 | (17)% | 1.4 | 5% | 0.2 | (17)% | 4.2 | -11% |
| | Q3 | 2.4 | (22)% | 1.1 | (24)% | 0.1 | (38)% | 3.7 | -24% |
| | Q4 | 2.2 | (22)% | 1.1 | (19)% | 0.1 | (30)% | 3.4 | -22% |
| FY23 E | Q1 | 2.4 | 38% | 1.4 | 119% | 0.1 | 61% | 3.9 | 60% |
| | Q2 | 3.0 | 15% | 1.8 | 26% | 0.1 | -29% | 4.9 | 17% |
| | Q3 | 2.5 | 4% | 1.4 | 30% | 0.1 | -20% | 4.1 | 11% |
| | Q4 E | 2.2-2.4 | 4% | 1.1-1.3 | 11% | 0-0.2 | -9% | 3.5-3.7 | 6% |
| FY24 P | Q1 P | 2.4-2.6 | 2% | 1.3-1.5 | 1% | 0-0.2 | -13% | 3.9-4.1 | 1% |
| | Q2 P | 2.5-2.7 | -14% | 1.4-1.6 | (19)% | 0-0.2 | -16% | 4.0-4.2 | -16% |
| | Q3 P | 2.9-3.1 | 17% | 1.5-1.7 | 10% | 0-0.2 | 7% | 4.5-4.7 | 14% |
| | Q4 P | 2.9-3.1 | 32% | 1.5-1.7 | 27% | 0-0.2 | 15% | 4.6-4.8 | 30% |

Data includes EVs
Source – SIAM, CRISIL MI&A

Domestic – Quarterly forecast

- After the sharp inventory built up done during Q2, offtake contracted during Q3; OEMs undertook inventory correction
- However, on a y-o-y basis, offtake witnessed growth in Q3
- Scooters clocked 30% growth on a low base while motorcycles witnessed slower growth at 4%
- Going ahead in Q4, further moderation is estimated amidst the increased prices as well as transition to BSVI phase 2. OEMs will focus on liquidating the old BSVI phase 1 inventory.
- We do not expect a sizeable impact of the norms of the 2W prices as well as retail demand
- For FY24 growth pace is expected to decelerate from the high base of FY23. Higher moderation is expected in scooter demand while motorcycle demand is estimated to provide the primary boost.
- EVs are expected to continue their strong growth trajectory with improvement in vehicle supply as well as increased vehicle options.

Stakeholder interactions

Consulting

OEMs



- Positive supply sentiments and considerable recovery in semiconductor supply which resulted in improved inventory in August and September
- Significant production push during Q2 was done for festive built up
- Robust growth was witnessed in festive season this year
- Some moderation in offtake and inventory correction was done during Q3
- Marginal price hike in Q4, no significant impact expected on the demand
- BSVI phase 2 transition to not have a sizeable impact
- Phase 2 vehicle dispatches may start from Q4 end
- Sluggish economic environment will exert pressure on the demand in FY24
- On a high base of FY23, some moderation in demand growth is expected
- Favourable rural demand to support demand growth
- EV traction rising and expected to continue in FY24 putting added pressure on ICE scooter sales

Dealer



- Inventory built up done in September as well as October
- Discounts were offered for the festive season across OEMs
- Festive retail demand was satisfactory during Q3
- Offtake was reduced, backing inventory correction
- Inventory levels have come down to 35-40 days from ~45 days at the start of the quarter
- Few OEMs have continued discounts in January (Makarsankranti)
- December retails were sluggish after strong October and November
- Customers have been notified of the price rise from January
- It did not result in significant pre buying- Enquiries to Conversion percentage remained low during December
- Positive agri output is expected to back rural demand going ahead
- Scooters have shown good growth during the year from a low base
- Enquiries for EVs remain strong
- Availability of EV is a concern

Financier

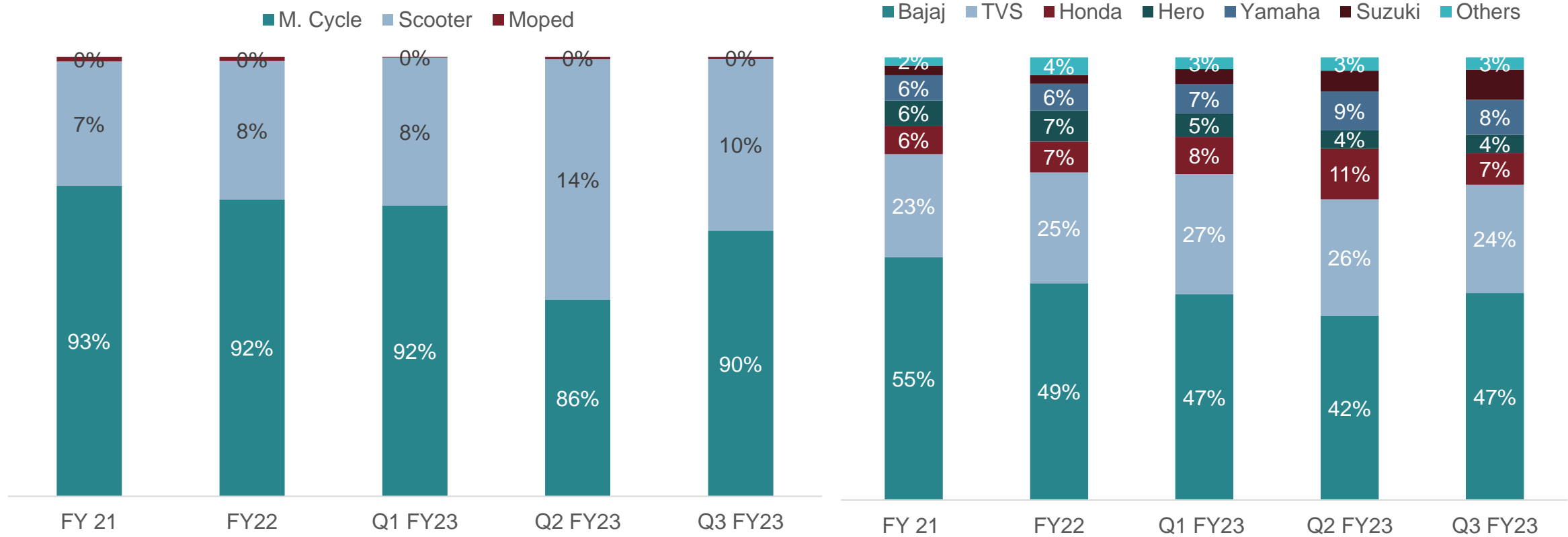


- Increased retail demand backed disbursement growth during Q3
- Interest rates have gone up in line with rising repo rate, whereas LTV remained on the similar lines.
- Price rise to not have a sizeable impact on the demand, will back the disbursements levels
- Financing scenario remains accommodative

Two-wheeler exports

Increased scooter exports in FY23

In turn, scooter major Honda extends its presence

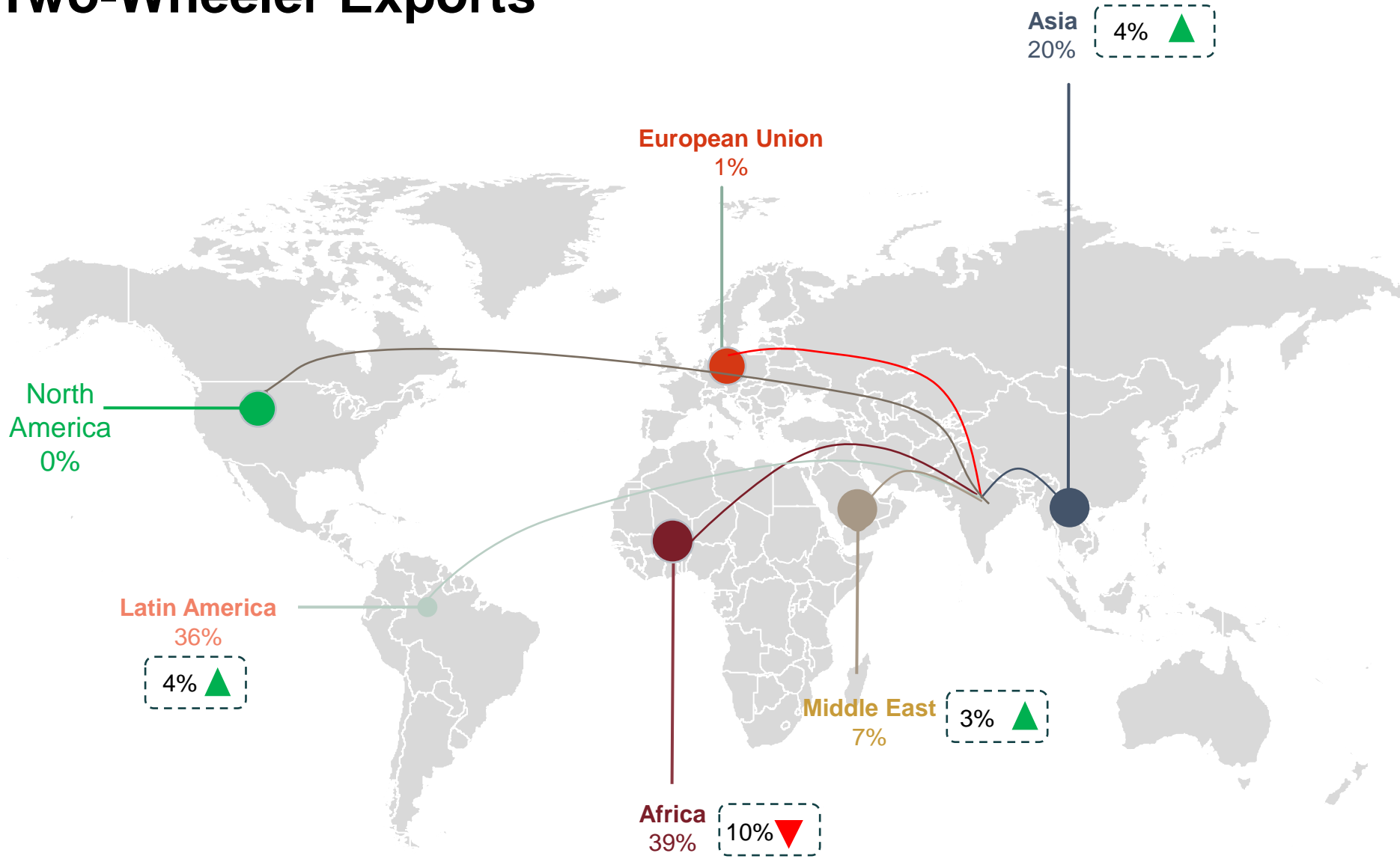


Source: SIAM, CRISIL MI&A

- Export demand increased substantially by 36% in FY22 over the lower base of FY21 as economies started recovering
- In the first 3 quarters of FY23, on a high base exports demand contracted 12% with ~14% drop in motorcycle exports
- On the other hand, scooter exports rose 15% y-o-y
- Thus, share of scooters has expanded in the exports mix and Honda extended its presence

© 2022 CRISIL Ltd. All rights reserved.

Two-Wheeler Exports



- There has been demand pressure in key export destinations due to global tightening and high inflation.
- Devaluation of currencies against the Indian rupee and US dollar has also made products expensive. ASEAN countries are lesser impacted than African economies due to worsening economic conditions.
- This can be seen in the FY23 YTD exports to Africa which lost share to Asia and LATAM countries
- For the complete year, some contraction in exports is expected from the increased base of last year

Commercial Vehicles

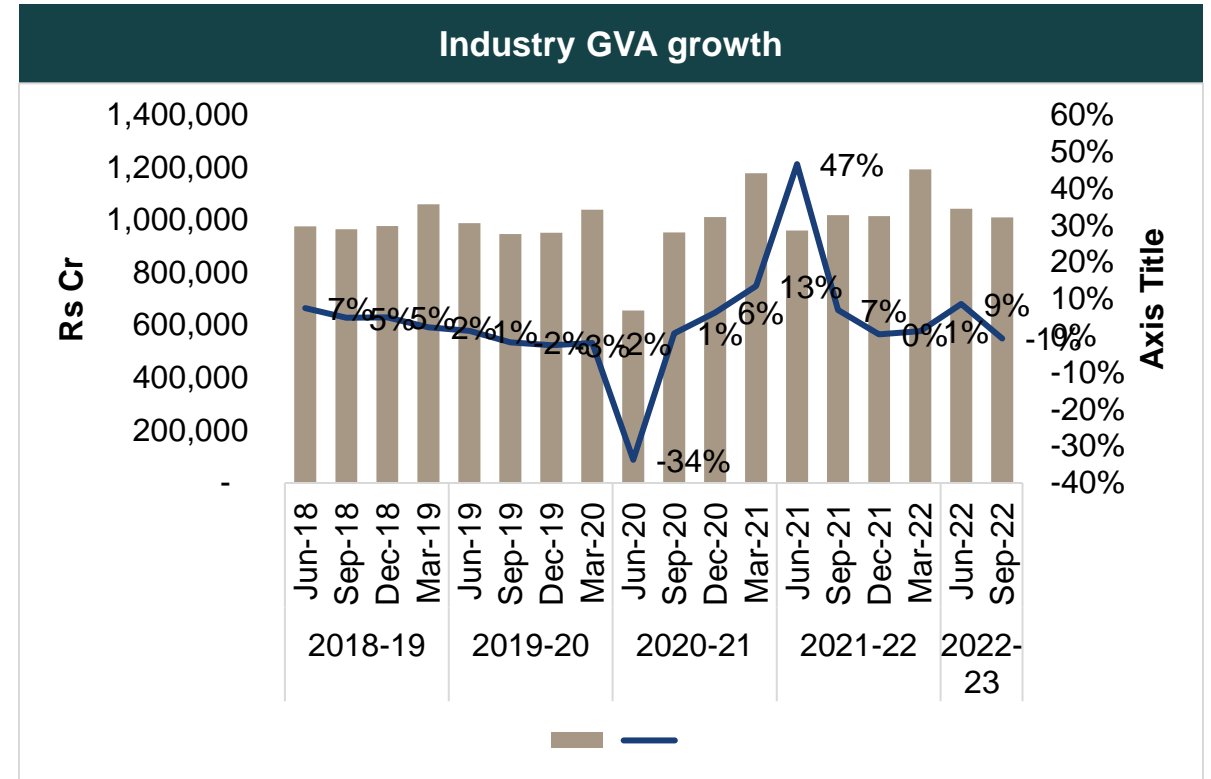
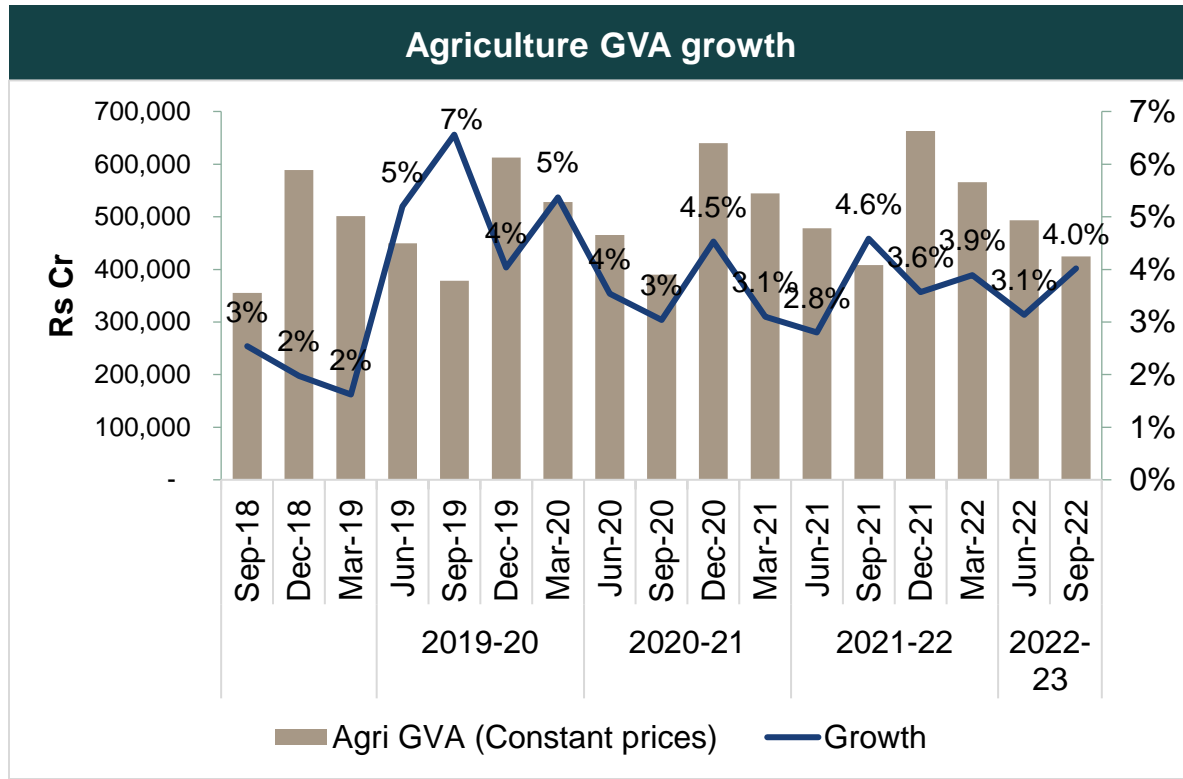
Overview of end-use segments - Cargo

| Segments (% Growth Y-o-Y) | FY 18 | FY 19 | FY 20 | FY 21 | FY 22 | FY 23 P | FY 24 P | |
|-------------------------------------|-------|-------|-------|-------|-------|---------|-----------|------------------------------|
| Coal (Production) | 2 | 7 | 0 | (2) | 9 | 7-9 | 9-11 | Core Sectors |
| Iron ore (Production) | 3 | 3 | 19 | (17) | 23 | 0-2 | 3-5 | |
| Steel (Consumption) | 8 | 9 | 1 | (5) | 11.4 | 10-12 | 7-8 | |
| Cement (Consumption) | 9 | 12 | (-3) | 1 | 9 | 10-12 | 8-10 | |
| Roads (Km Constructed / Day)-NHAI | 8 | 9 | 11 | 11 | 13 | 14-15 | 15.5-16.5 | |
| Port (Traffic) | 6.5 | 8.2 | 2 | (5.5) | 4.3 | 5-8 | 3-6 | |
| Two-wheelers (Domestic sales) | 14.8 | 5 | (18) | (13) | (11) | 9-11 | 5-7 | Discretionary Products |
| Passenger vehicles (Domestic sales) | 8 | 3 | (18) | (2) | 13 | 24-26 | 0-2 | |
| Consumer durables (Consumption) | 5.8 | 7 | 5 | (17) | 12-17 | 10-13 | 6-8 | |
| E-retail | 35 | 35-37 | 23 | 13 | 27 | 20-25 | 20-25 | |
| RMG (Market Size) | 5 | 6 | (2) | (24) | 23 | 14-16 | 10-12 | |
| Dairy (Production) | 6.7 | 7 | 5 | (4) | 3 | 5-7 | | Non - Discretionary Products |
| FMCG | 8 | 12 | 5 | 3.5 | 13-15 | 8-10 | 7-9 | |
| Pharmaceuticals (Market Size) | 1 | 15 | 9 | 13 | 7-8 | 6-8 | 9-11 | |

Overview of end-use segments - Buses

| Segments (% Growth Y-o-Y) | FY 18 | FY 19 | FY 20 | FY 21 | FY 22 | FY 23 P | FY 24 P | |
|--|-------|-------|-------|-------|-------|---------|---------|--------------|
| Gross School Enrollment | | | | | | | | Buses |
| K-12 | 73.4 | 73.4 | 78 | 74.5 | 74.8 | 75.1 | 75.4 | |
| Above K-12 | 23.4 | 22.5 | 22.5 | 22.2 | 23.0 | 23.4 | 23.4 | |
| IT Employee Base | 3 | 4 | 4 | 7 | 14.5 | 8-10 | 5-9 | |
| Air Passenger Traffic (million passengers) | 188 | 209 | 209 | 64.4 | 106.8 | 195 | 210-230 | |
| Hotel Room Demand | 5 | 4 | 1 | (51) | 74 | 25-30 | | |

Agriculture is expected to maintain a healthy growth momentum Consulting – growing 3% in fiscal 2023 and fiscal 2024

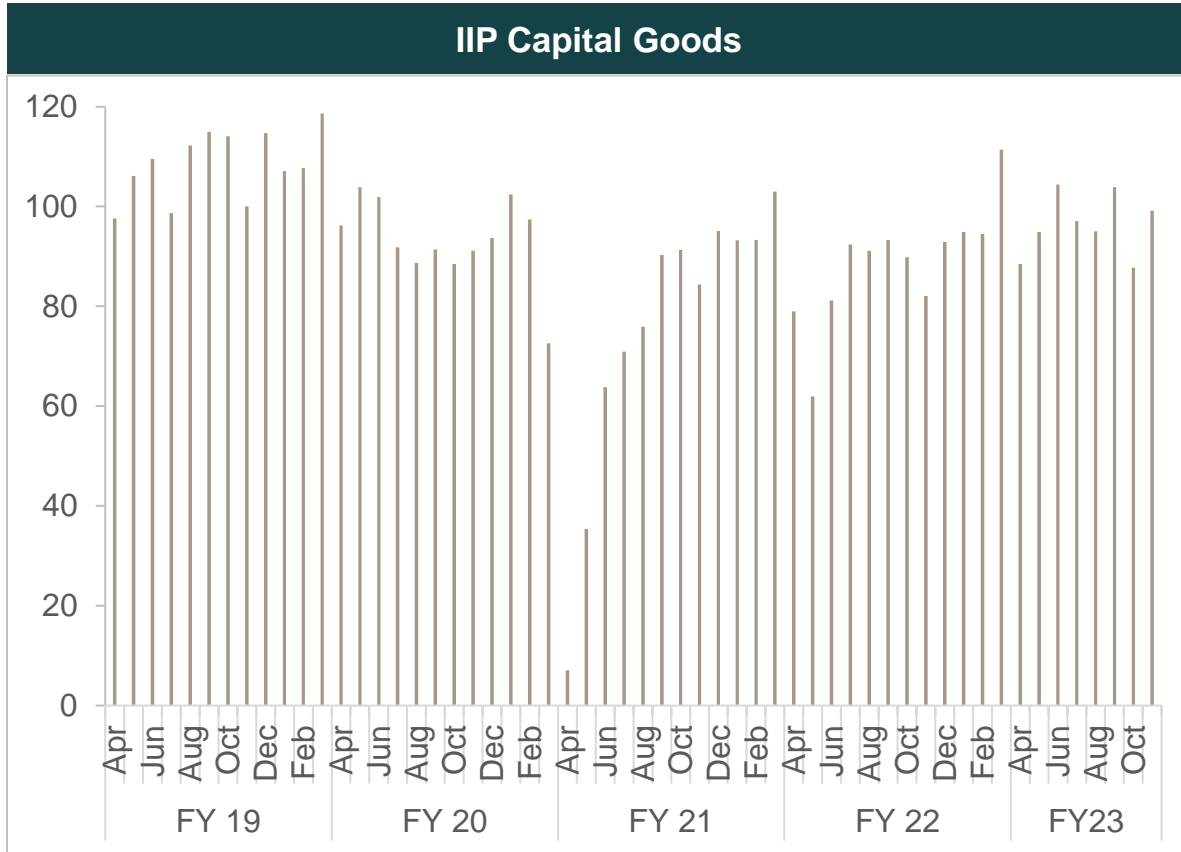


Source: MOSPI, CRISIL MI&A

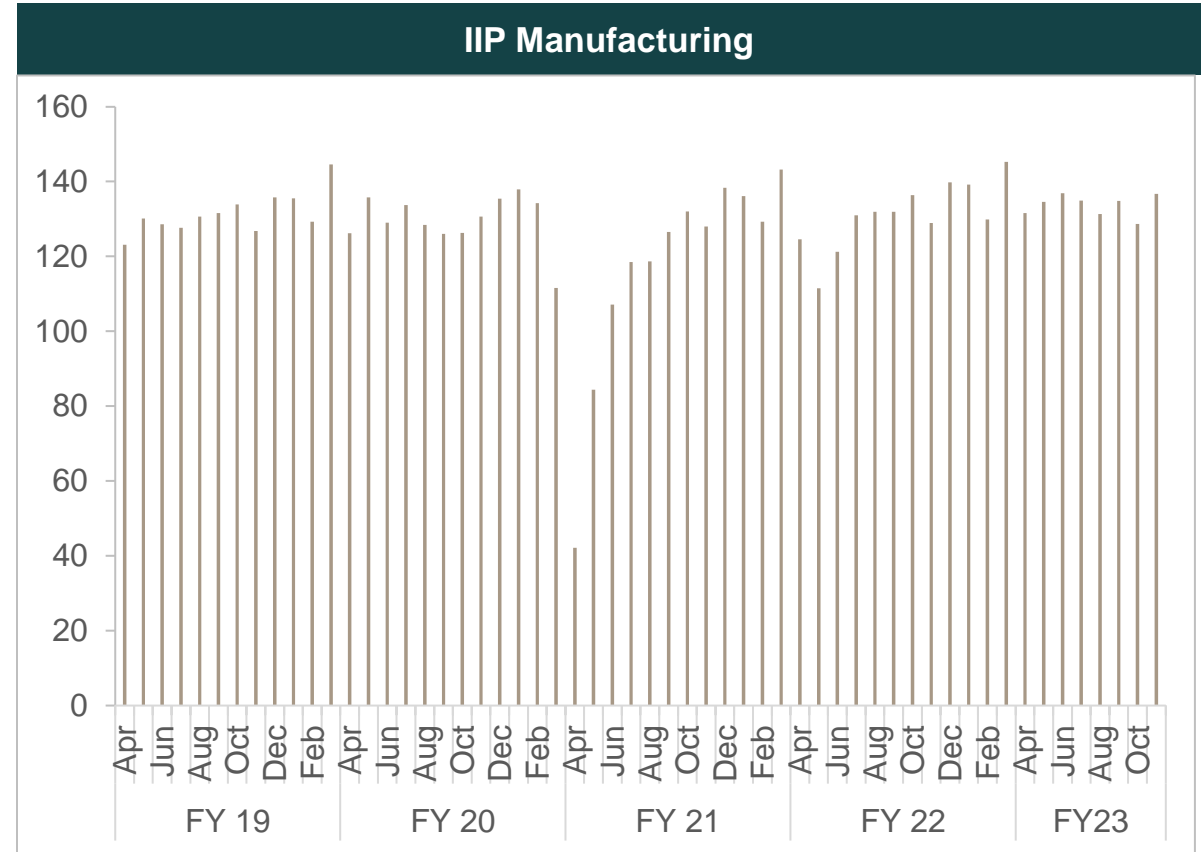
- Agri GDP grew at 4% on-year during Q2FY23. Growth in Q2 FY22 was around 4.6%
- Overall agriculture growth is expected to remain at 3% in next fiscal, given expectation of healthy kharif production, and adequate reservoir levels
- Industry GVA witnessed -1% growth in Q2 FY23

© 2022 CRISIL Ltd. All rights reserved.

IIP Touched pandemic lows in October; some improvement in November



Source: MOSPI, CRISIL MI&A

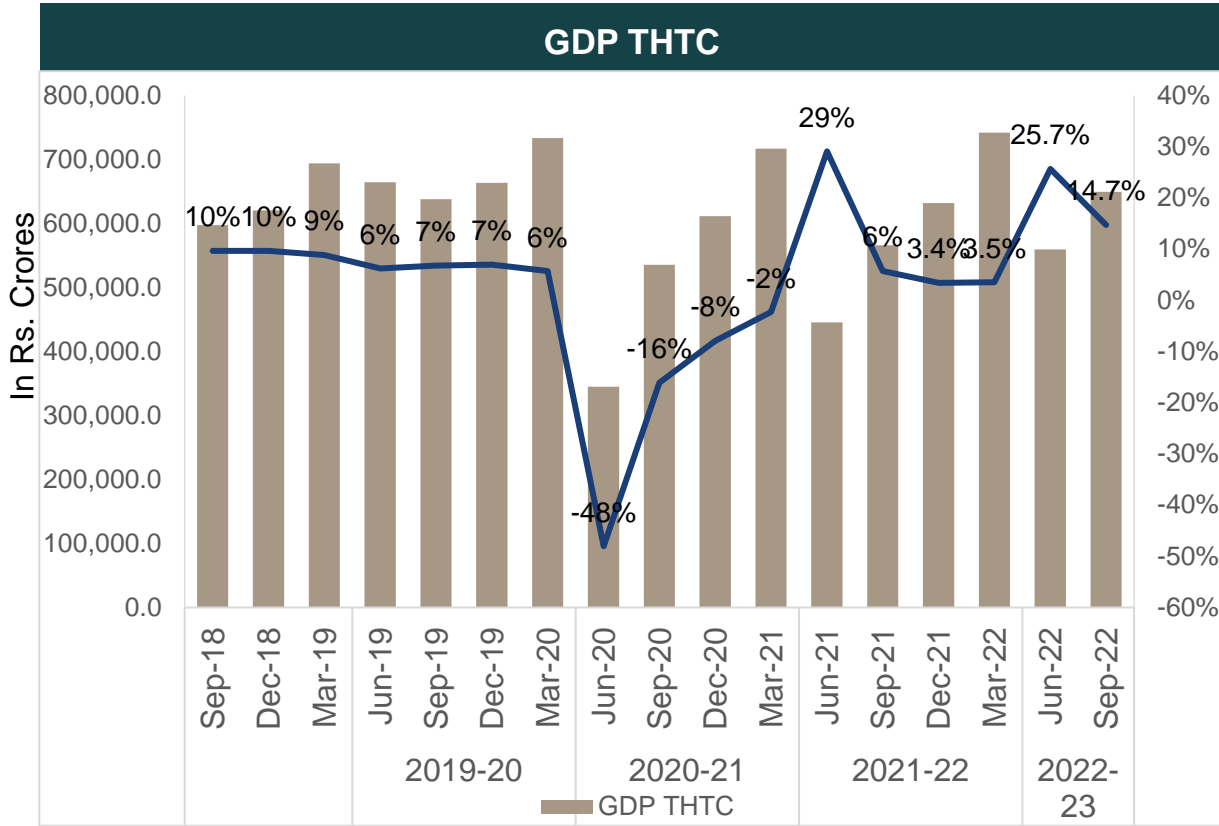


Source: MOSPI, CRISIL MI&A

- The Index of Industrial Production (IIP) stayed volatile, falling 4% on-year in October in contrast to 3.5% growth in September. This was the sharpest fall since August 2020. While an unfavourable base was partly responsible, activity slipped sequentially as well. All major sectors saw IIP fall, with manufacturing seeing the sharpest decline.
- All major sectors saw IIP fall, with manufacturing seeing the sharp decline in Oct; The decline in manufacturing activity was imminent given the sharp decline in exports seen in October.
- Some improvement witnessed in November across manufacturing, capital goods as well as IIP general.

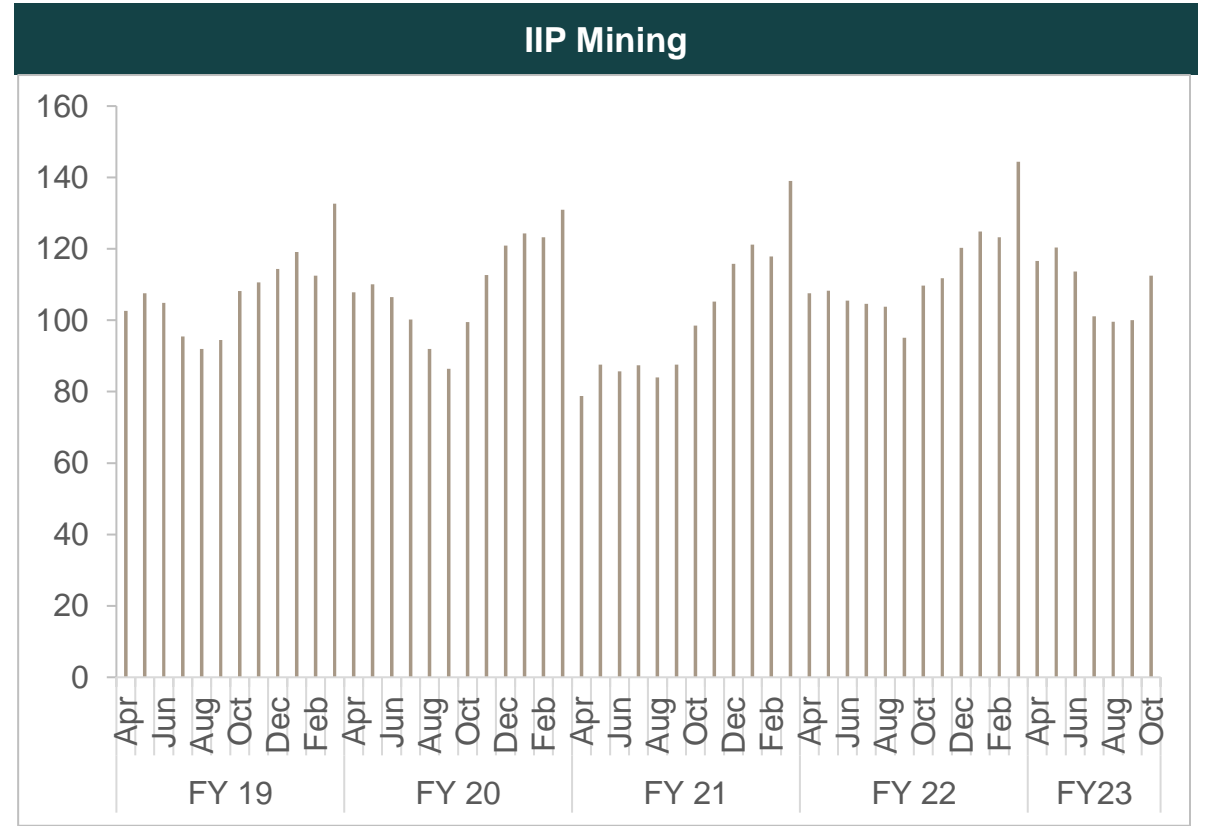
© 2022 CRISIL Ltd. All rights reserved.

GDP THTC sees growth on low base; Mining IIP growth holds ground



NOTE: THTC: Transport Hotel Transport Communication Services

Source- MOSPI, CRISIL MI&A

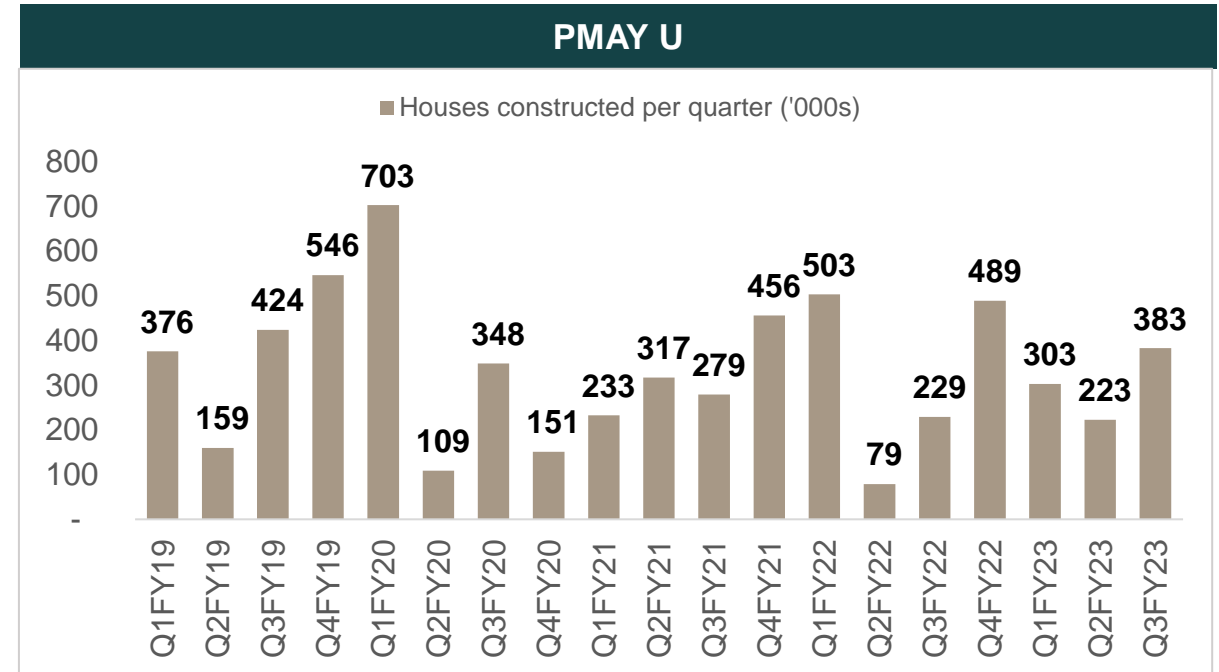
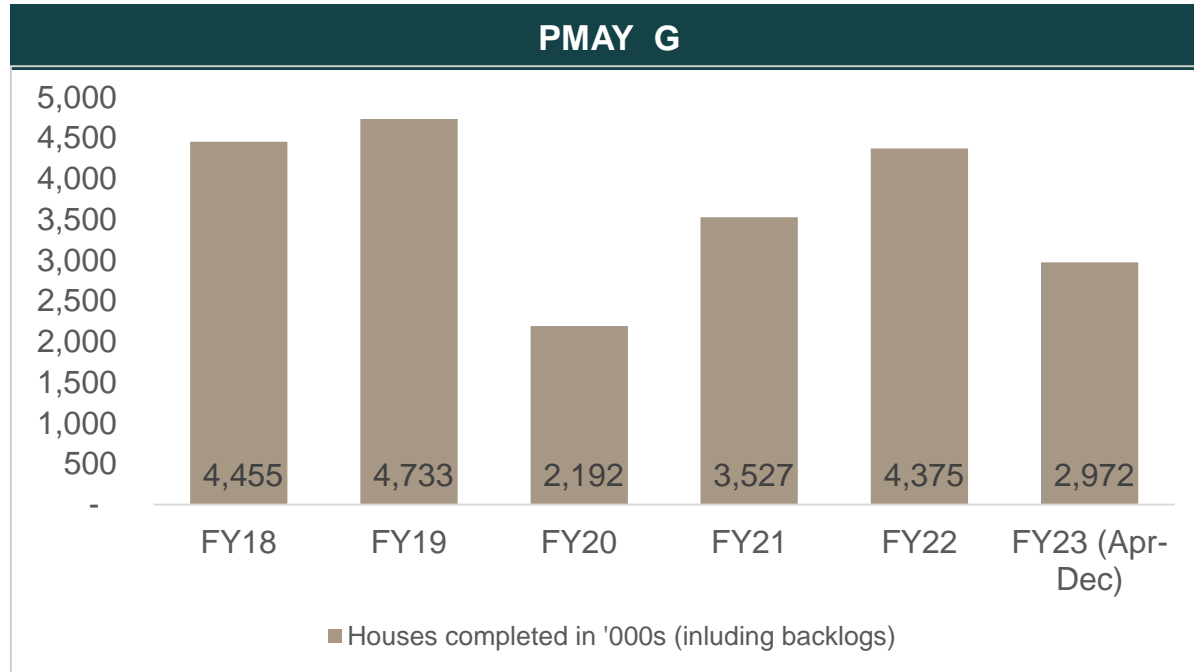


Source: MOSPI, CRISIL MI&A

- GDP THTC registered a growth of 14.7% in second quarter over Q2FY23. This segment is showing tremendous growth on account of tourism sector picking up.
- Mining IIP grew 2.5% on-year in October compared with 5.2% previous month and 11.5% in October 2021. Sequentially, it grew 0.6%

© 2022 CRISIL Ltd. All rights reserved.

1.23 Cr houses sanctioned under PMAY-Urban, 63.27 lakh units already built



- Out of the total sanctioned houses under PMAY-Urban, 104.12 lakh have been grounded for construction and 63.27 lakh units have already been completed or delivered to beneficiaries.
- The highest execution was when there were elections in FY19 post which activities have tapered off
- ~50% of the homes sanctioned being completed in the urban areas.

Note: Current coverage on PMAY and PMGSY is on a annual/quarterly basis, monthly coverage to be initiated post receipt of mandate

Source: MOSPI, CIL, SCCL, NHAI, NRIDA, MoRD, CRISIL MI&A

Overview of end-use segments – Discretionary consumer goods



| Segments (% Growth Y-o-Y) | FY 18 | FY 19 | FY 20 | FY 21 | FY 22 E | FY 23 P | FY24P |
|--|-------|-------|-------|-------|---------|---------|-------|
| Consumer durables (Consumption) | 5.8 | 7 | 5 | (17) | 12-17 | 10-13 | 6-8 |

- Rising inflation and reduced discretionary spend is expected to limit growth of household appliances sector in fiscal 2023 and fiscal 2024.
- Consumption is expected to witness moderation next fiscal, which will have an impact on household appliances growth. Domestic demand could come under pressure as interest rate hikes gets transmitted more to consumers. CRISIL MI&A thus expects sector to grow 6-8% in fiscal 2024.



| Segments (% Growth Y-o-Y) | FY 18 | FY 19 | FY 20 | FY 21 | FY 22 E | FY 23 P | FY24P |
|------------------------------|-------|-------|-------|-------|---------|---------|-------|
| E-retail | 35 | 35-37 | 23 | 13 | 27 | 20-25 | 20-25 |

- The sector is expected to witness 20-25% growth in fiscal 2023 on account of higher discretionary spending and waning impact of the pandemic. An improving economy amid low to moderate inflation is expected to drive consumer spends in the medium to long term, propelling growth in the retail industry. Among verticals, food & grocery is expected to grow at a healthy pace on back of significant offline as well as online impetus.



| Segments (% Growth Y-o-Y) | FY 18 | FY 19 | FY 20 | FY 21 | FY 22 | FY 23 P | FY24 P |
|------------------------------|-------|-------|-------|-------|-------|---------|--------|
| RMG (Market Size) | 5 | 6 | (2) | (24) | 23 | 14-16 | 10-12 |

- Overall RMG industry revenues increased by 22-24% in fiscal 2022. The demand was driven by US ban on China, arrival of festive season, revival in overall economy along with reopening of offices, schools, and other enterprises. This fiscal, domestic demand is estimated to grow by 14-16% on year basis and will be driven by revival in consumer spend amid improving economy. While overall RMG exports are likely to grow at 9-11%, exports to USA is likely to remain healthy.

Overview of buses (1/2)



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

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



| Segments (% Growth Y-o-Y) | FY 18 | FY 19 | FY 20 | FY 21 | FY 22 | FY 23 P | FY24P |
|----------------------------------|-------|-------|-------|-------|-------|---------|-------|
| Growth in number of IT employees | 3 | 4 | 4 | 7 | 14.5 | 8-10 | 5-9 |

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

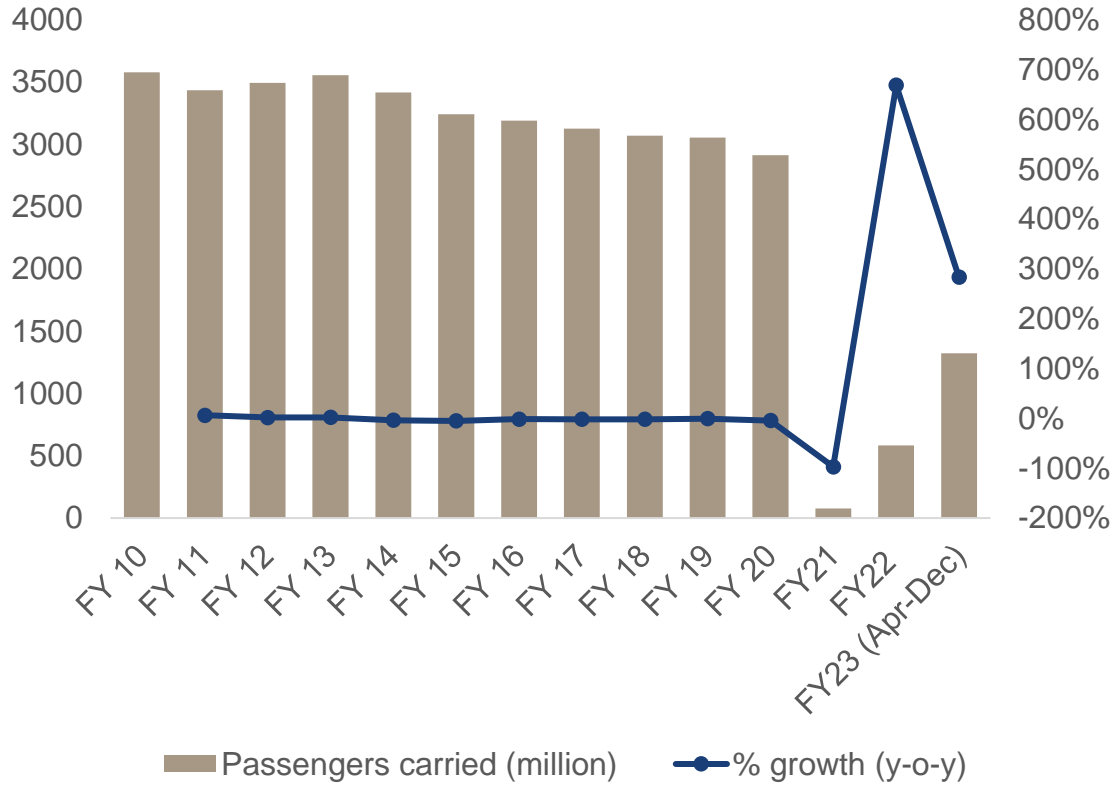


| Segment | FY 18 | FY 19 | FY 20 | FY 21 | FY 22 | FY 23 P |
|------------------------------|-------|-------|-------|-------|-------|---------|
| Pan India hotel rooms supply | 72028 | 75250 | 77410 | 79051 | 83617 | 91162 |
| Occupancy rates (%) | 65 | 65 | 64 | 31 | 50 | 60 |

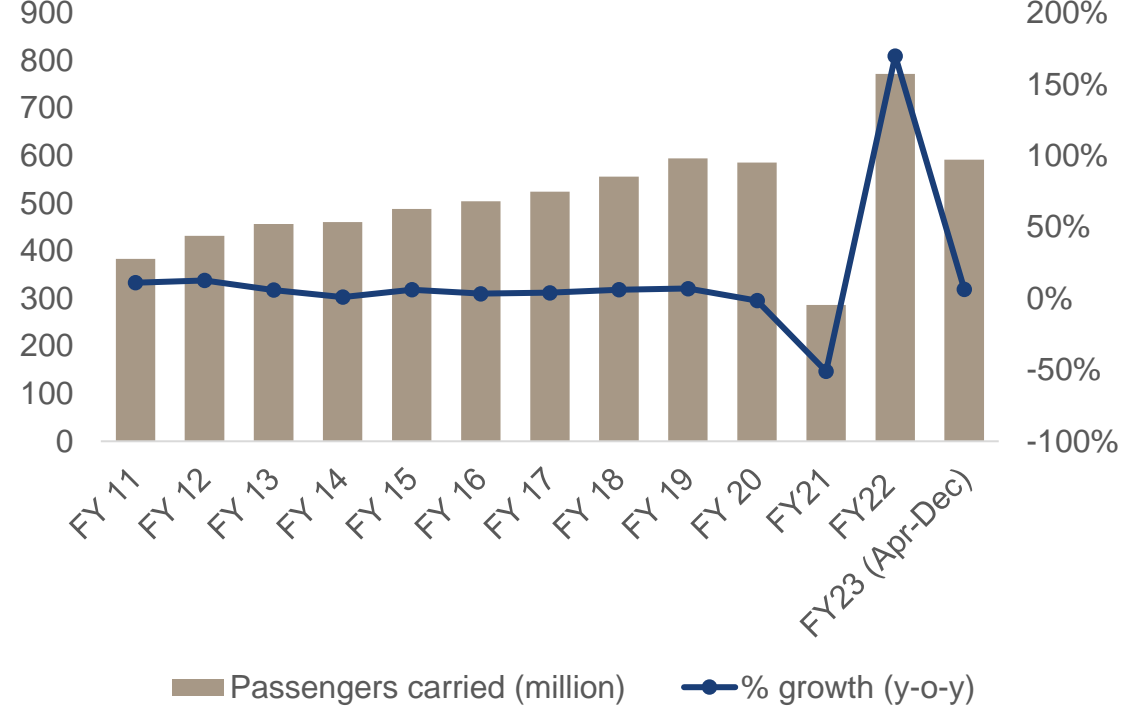
- The hotels sector is expected to witness strong growth in fiscal 2023, on the back of a recovery in major demand drivers as the economy picks up. The sector will likely reach pre-pandemic levels in absolute terms, as it emerges from the shadows of the pandemic.
- Premium hotels saw a sharp recovery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

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

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

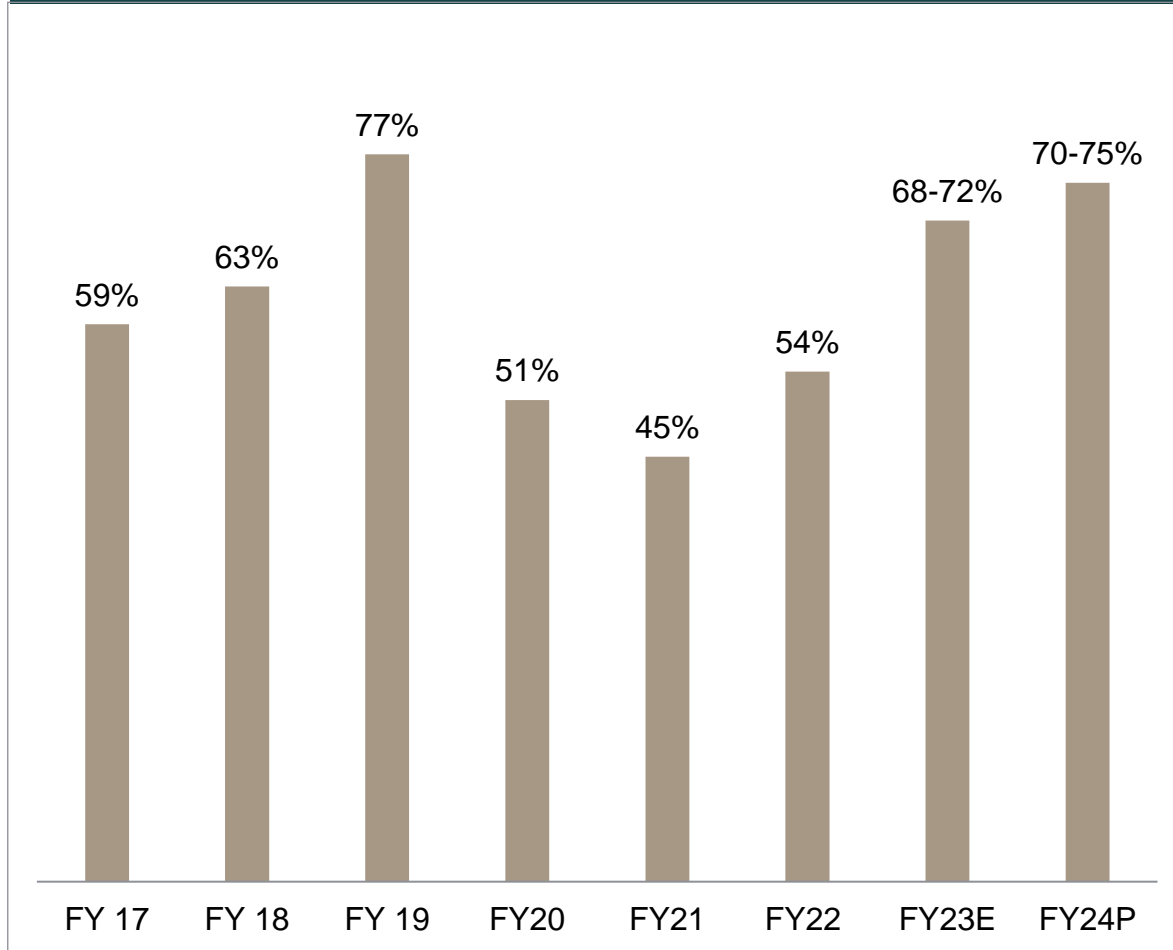


Railway Passenger Traffic growth (%) - Non-suburban - Unreserved



Capacity utilisation to further increase as production will pick up in last quarter on account of BS6 B

Decline in capacity utilization level



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

Source: Industry, CRISIL MI&A

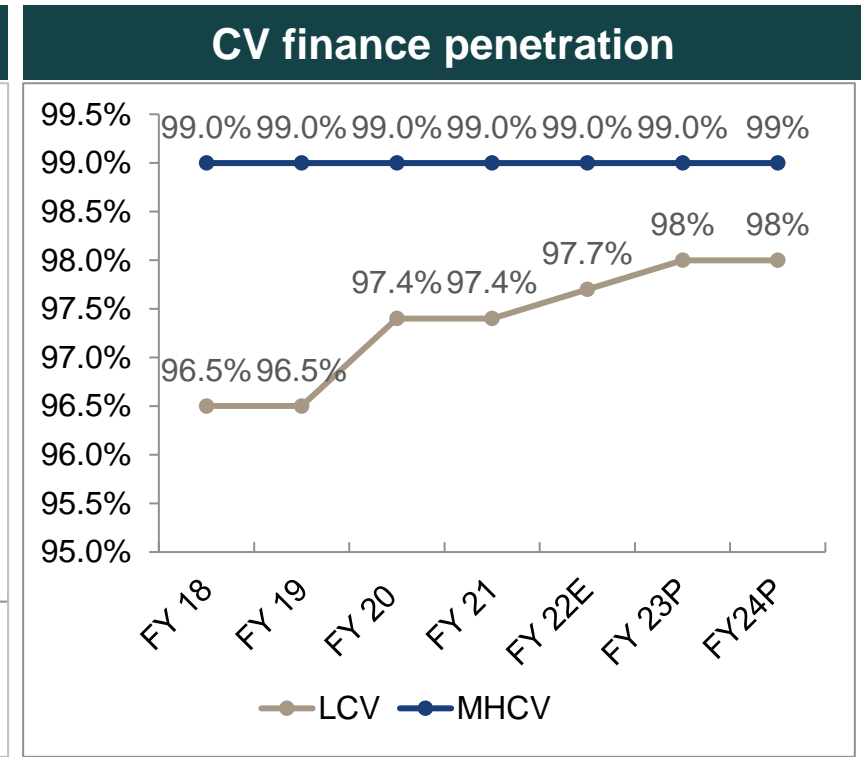
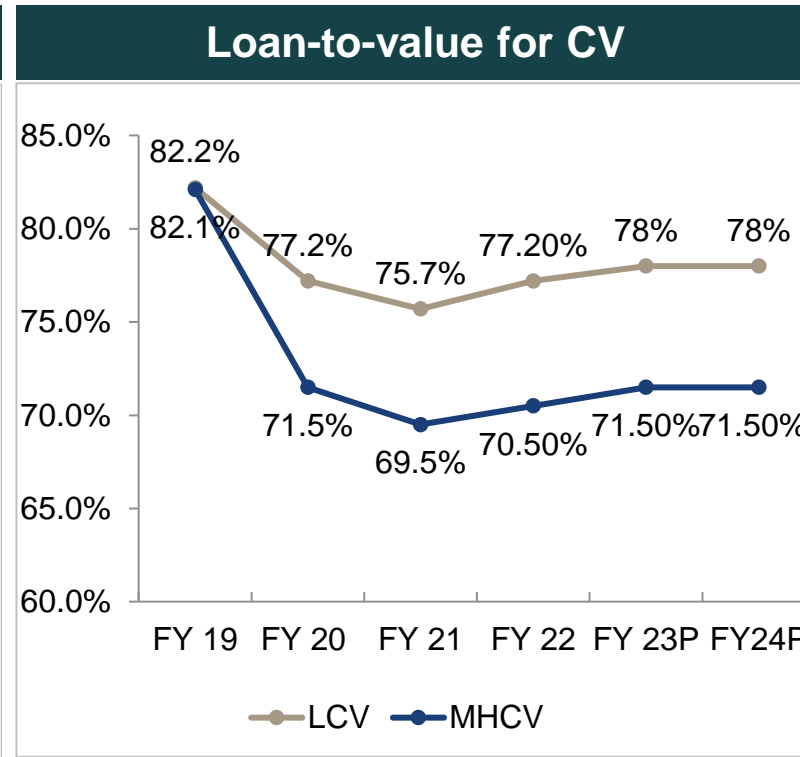
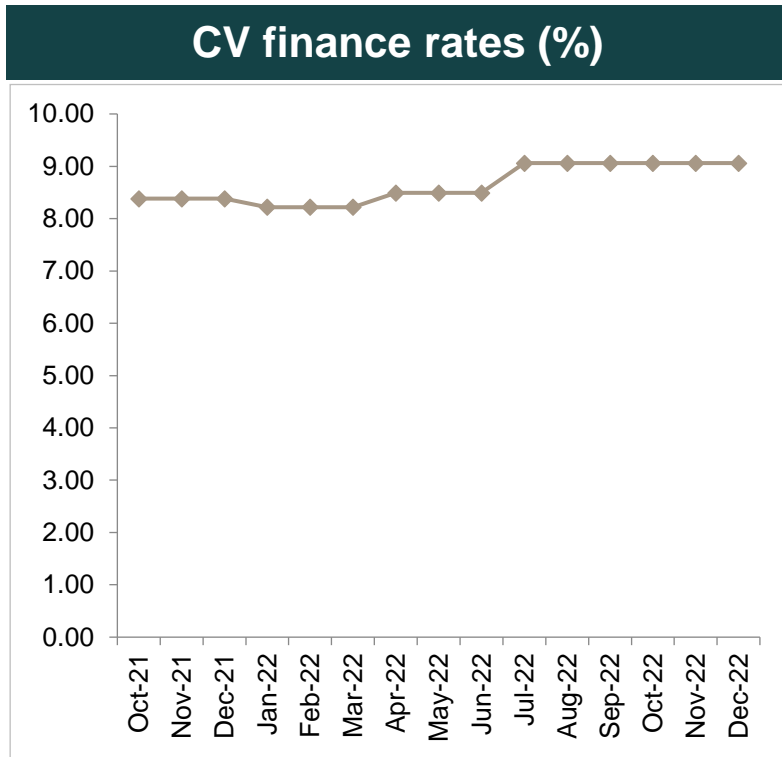
Player-wise capacity utilisation

| Player | Effective Capacity estimate (as on 31st Mar 2020) | Production Apr-Dec FY23 (in '000) | Capacity utilization in Apr-Dec FY23 |
|---------------------|---|-----------------------------------|--------------------------------------|
| Ashok Leyland | 2,22,300 | 137,749 | 83% |
| Eicher Motors | 97,500 | 53,986 | 74% |
| Tata Motors | 7,62,000 | 293822 | 51% |
| Mahindra & Mahindra | 2,92,000 | 193,061 | 88% |

Capacity additions

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

Cautious lending by banks; more focus on collections



NOTE - Interest rates are an indicative rates charged by Banks

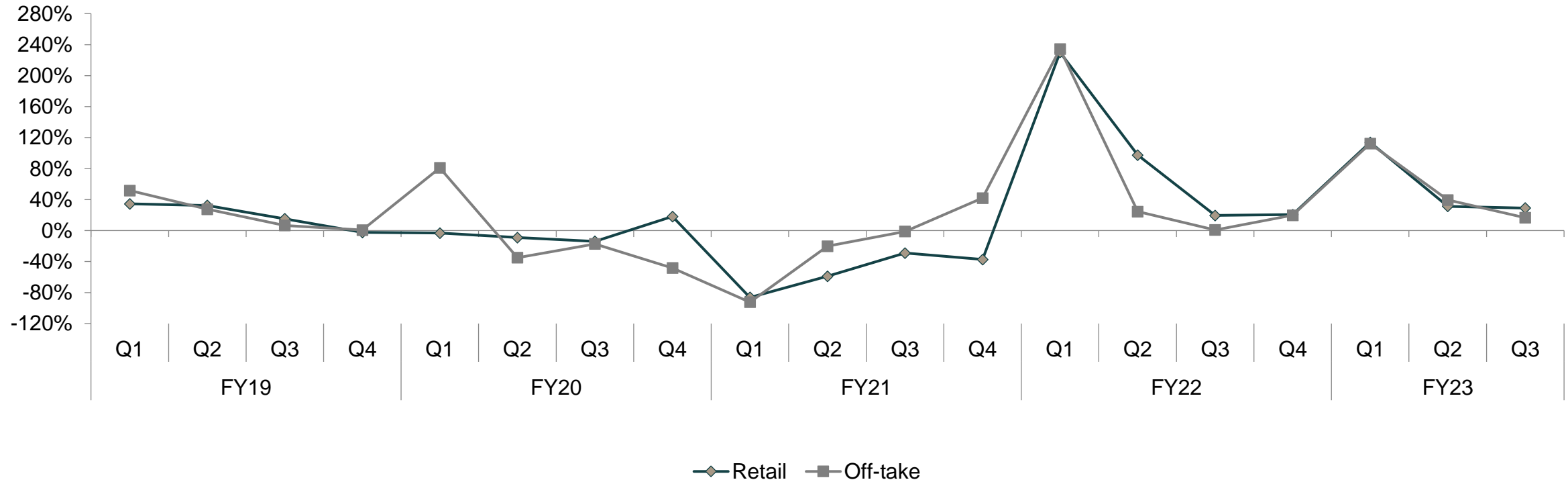
Source: Company Reports, Industry, Crisil MI&A

© 2022 CRISIL Ltd. All rights reserved.

Retail & offtake showing recovery on sequential basis; Retail momentum to continue on account of demand and BS6B price impact from April 2023

Consulting

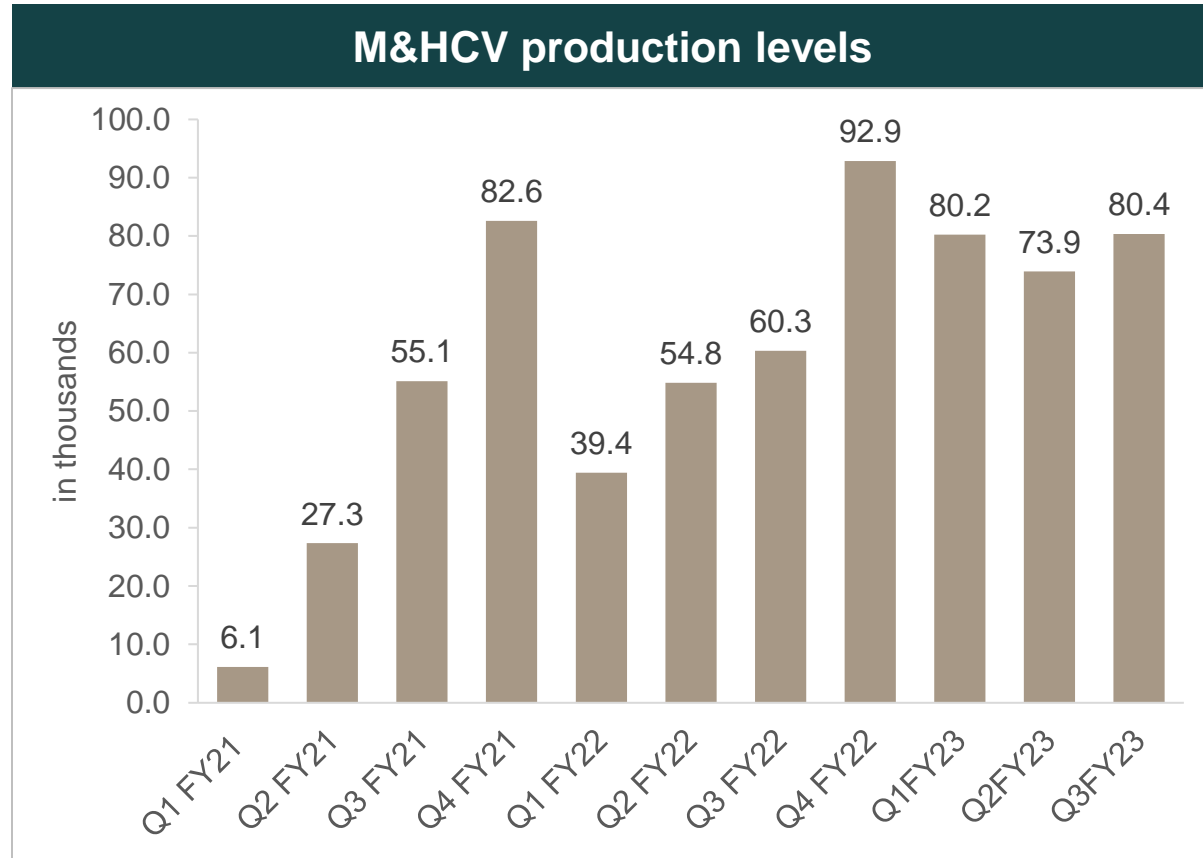
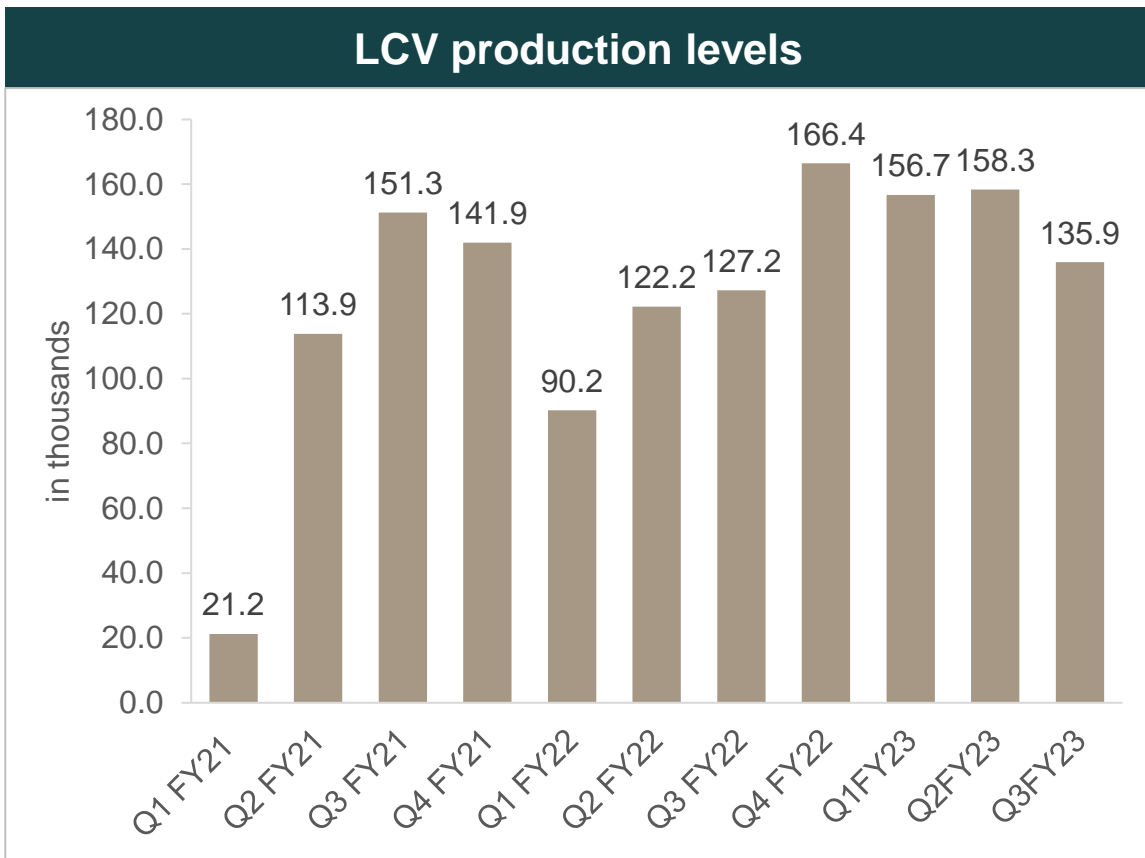
Retail vs off-take (Growth y-o-y)



© 2022 CRISIL Ltd. All rights reserved.

Source: SIAM, MoRTH, CRISIL MI&A

Production of MHCVs continues to see upward trajectory behind story of infra dependent applications and replacement

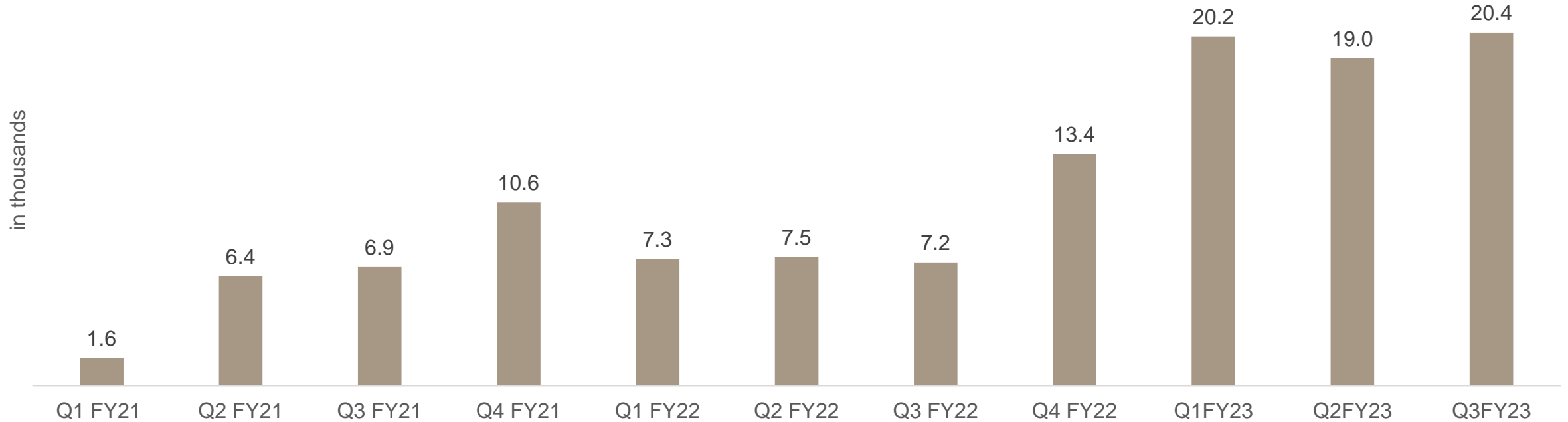


- Production for LCV and MHCV increased by approx. 7% and 33% respectively Y-o-Y in Q3 FY23 on account of increase in demand from MHCV's
- Production to further witness growth in the last quarter as the market demand remains strong and OEMs would prepare themselves for BS6 B scenario

NOTE: Figures in thousands
 Source: SIAM, CRISIL MI&A

Bus demand supported by tourism and STU procurement in Q3FY23

Buses production levels



© 2022 CRISIL Ltd. All rights reserved.

- Demand for buses continued to do well even in Q3 FY23 on account of increasing tourism.
- Q4FY23 will continue to see several STU-PPP orders especially from the southern and northern states viz. Karnataka, Maharashtra, West Bengal, and Delhi.

NOTE: Figures in thousands
Source: SIAM, CRISIL MI&A

Domestic – Annual forecast

| Sales | Units | LCV cargo | IMHCV cargo | Buses | CV | EV Penetration |
|---------------------|-----------|-----------|-------------|----------|------------------|----------------|
| FY22 | Thousands | 472 | 227 | 32 | 731 | 2% |
| <i>y-o-y growth</i> | % | 19% | 47% | 90% | 29% | |
| FY23E | Thousands | 582-587 | 308-313 | 80-85 | 970-980 | 2-4% |
| <i>y-o-y growth</i> | % | 23-25% | 36-38% | 152-154% | 33-35% | |
| FY24P | Thousands | 613-618 | 308-314 | 90-95 | 1010-1020 | 3-5% |
| <i>y-o-y growth</i> | % | 4-6% | 0-1% | 12-14% | 3-5% | |

Domestic – Quarterly forecast (1/2)

Consulting

| Annual | Quarter | LCV cargo | | IMHCV cargo | | Buses | | Total | |
|--------|---------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|
| | | Sales ('000) | y-o-y growth | Sales ('000) | y-o-y growth | Sales ('000) | y-o-y growth | Sales ('000) | y-o-y growth |
| FY22 | Q1 | 75.8 | 180% | 27.3 | 567% | 5.7 | 389% | 108.8 | 237% |
| | Q2 | 111.2 | 4% | 51.3 | 115% | 6.6 | 57% | 169.2 | 24% |
| | Q3 | 131.4 | (7%) | 60.4 | 21% | 7.3 | 67% | 199.1 | 1% |
| | Q4 | 153.3 | 20% | 88.1 | 16% | 12.7 | 53% | 254.2 | 19% |
| FY23 E | Q1 | 141.7 | 87% | 67.4 | 147% | 20.2 | 255% | 229.3 | 111% |
| | Q2 | 147.0 | 32% | 72 | 40% | 18.9 | 185% | 237.9 | 41% |
| | Q3 | 138.3 | 5% | 76.8 | 27% | 16.8 | 131% | 231.9 | 16% |
| | Q4 E | 157-159 | 2-4% | 93-95 | 6-8% | 25-27 | 102-104% | 277.6 | 8-10% |
| FY24 P | Q1 P | 133-135 | (6)-(4)% | 64-66 | (5)-(3)% | 23-25 | 15-17% | 222.3 | (4)-(2)% |
| | Q2 P | 149-151 | 1-3% | 75-77 | 5-7% | 19-21 | 5-7% | 245.7 | 2-4% |
| | Q3P | 164-166 | 19-21% | 78-80 | 3-5% | 19-21 | 19-21% | 264.4 | 13-15% |
| | Q4P | 167-169 | 5-7% | 89-91 | (5)-(3)% | 28-30 | 10-12% | 286.2 | 2-4% |

Source – SIAM, CRISIL MI&A

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

Stakeholder interactions



Transporters

Utilization levels

- After some tapering off in Q1FY23, utilisation level witnessed promising growth in Q2FY23 and have been at similar levels.
- Utilisation in FMCG/CD, courier/parcels due to e-commerce and freight goods experienced a boost thanks to festive season. Auto-carriers and textiles are also expected to propel in utilisation level. Though the sectors faced hiccups post festive with freight rates declining largely due to freight rates correction, but utilisation remained constant
- Regulatory norms and geopolitical issues that were affecting states such as Orissa have been resolved to some extent and Iron ore transportation in Orissa has been resumed
- Undergoing and upcoming infrastructure projects in roads, bridges, and metros augment well for steel and cement transportation
- Preference for higher tonnage vehicles in trailers and tippers is becoming prominent among transporters



Dealers & OEMs

Demand Story

- The SCV segment now offers a wide selection of products, covering various tonnages that cater to the needs of all types of customers. Players have launched numerous products, especially over the past five years, to plug gaps in tonnages.
- Demand for SCVs and ICVs continues to be driven by FMCG, e-commerce, and agriculture.
- CNG adoption is more prominent in sub-one tonne and ICV segments. However, in past 6-8 months the CNG vehicles have witness a fall in demand especially due to increased CNG prices.
- The recently announced National Logistics Policy (NLP) aimed at easing the goods movement coupled with PM Gati Shakti National Master Plan (NMP) will magnify long haul movements, in turn the demand for MHCVs.
- Strong demand from construction, infrastructure, and mining activities are boosting Tipper volumes
- MHCV haulage seeing relatively slower ramp up on the retail side, but LFO participation is moderate.
- BS-VI phase 2 expected to be implemented from April 2023 entails addition of on-board self-diagnostic device (OBD2) to monitor real time emissions. The addition of OBD2 will also require upgrades to hardware and software of the vehicles to comply with the new norms which will entail increase in prices of vehicles by ~2-4%.



Financier

LTVs and participation levels

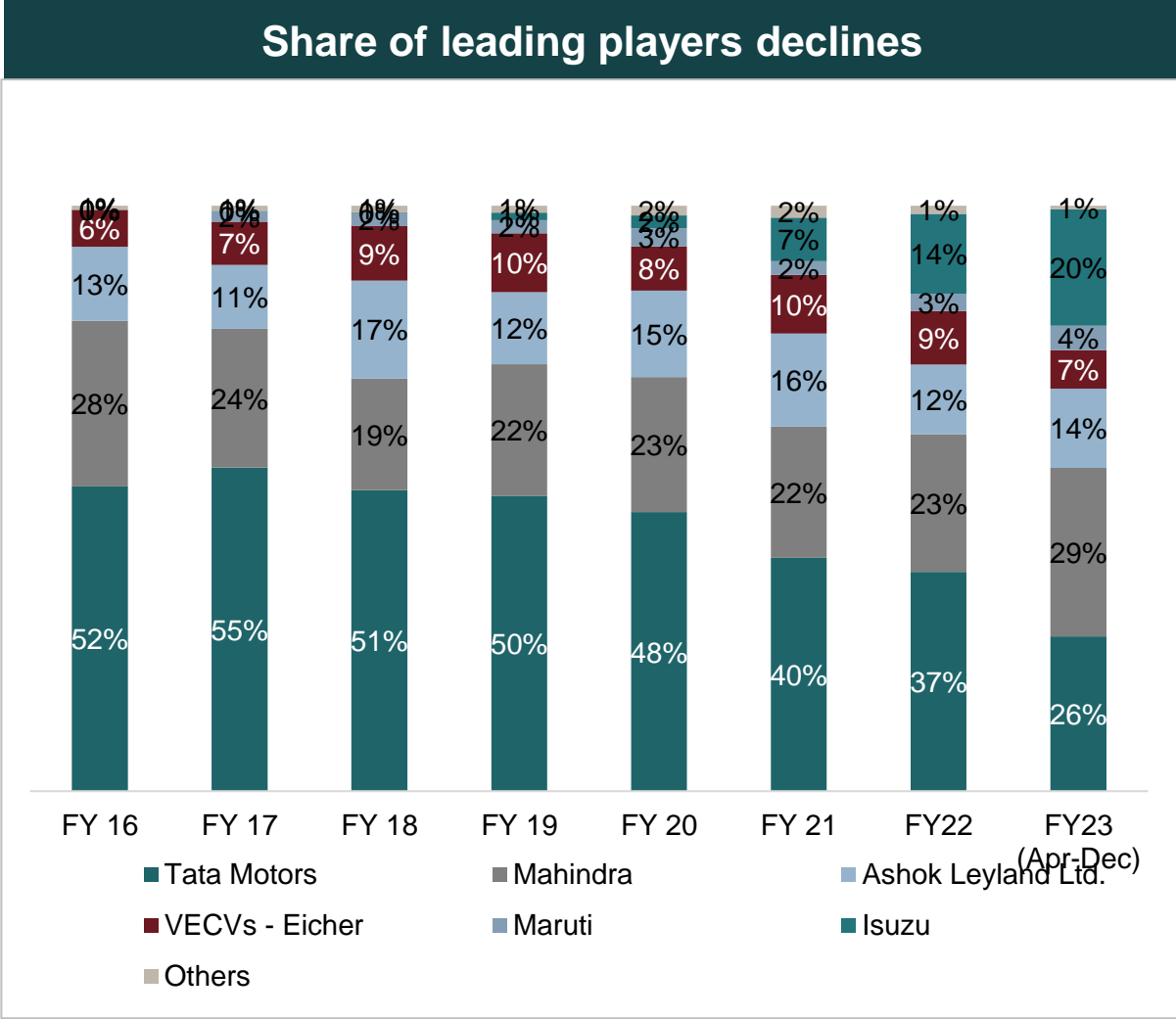
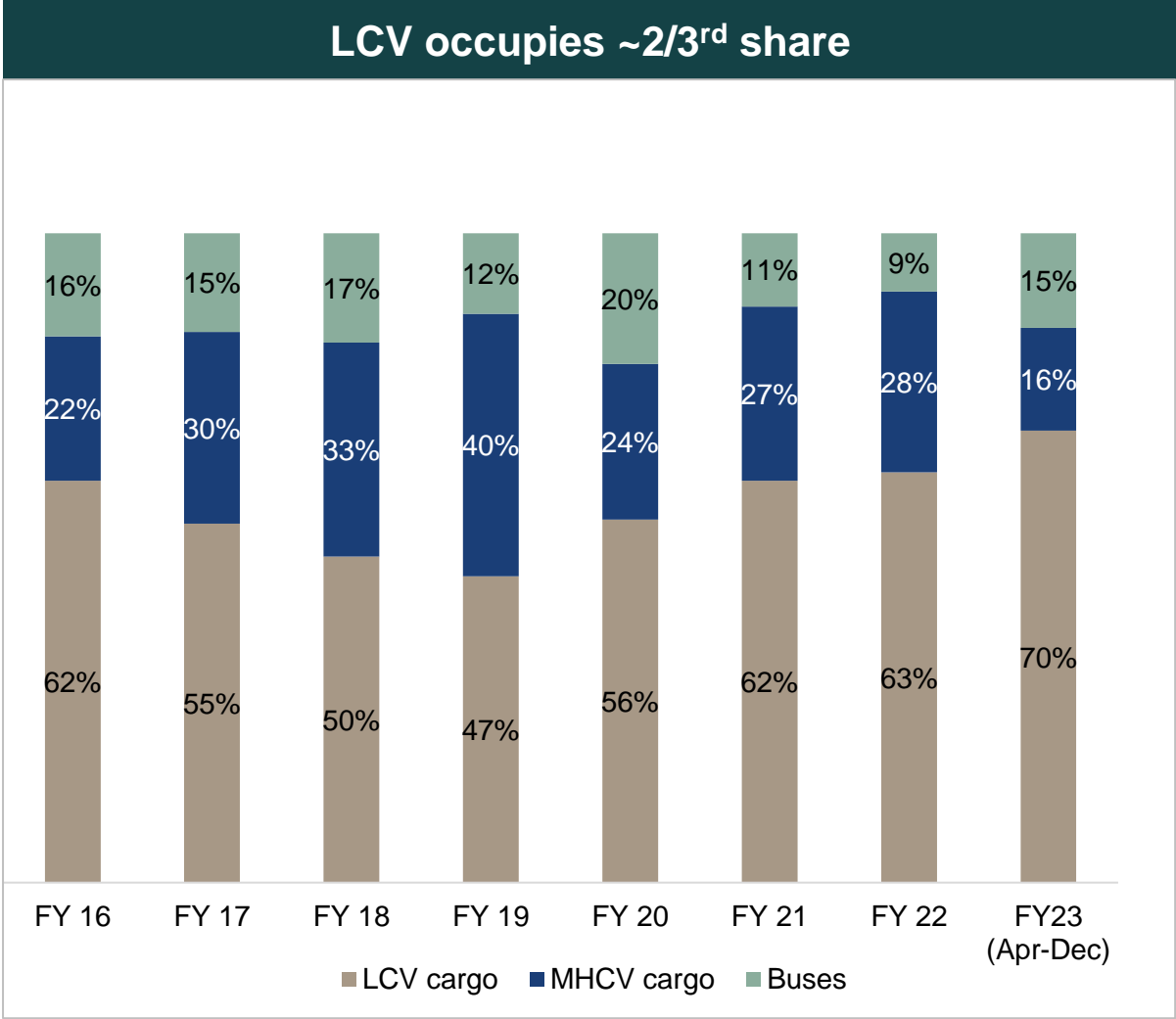
- SCVs are witnessing aggressive financing options and higher loan offerings
- Thanks to the festive season, various attractive loan schemes are being offered to lure fleet operators
- Funding for retail customers in MHCV cargo and tippers has improved largely but still retail participation is slow in some segments. Most deals being closed are either LFO's or strategic customers.
- Cargo operators face issues with financing as several of them were unable to repay their loans
- With standardization in truck body building, financiers are expected to be more willing to fund the generally unsupported body building cost
- The impact of repo rate hikes by RBI must be monitored closely going forward. Hike in interest rates has caused some dampen in demand for more financing sensitive segments such as SCV.
- For some cases in retail funding, customer have been asked to present contract copy or guarantor particularly for MHCVs.
- Demand in the buses segment is fuelled by largely by STUs and replacement demand. Also, financiers have been cautious and have increased number of checks in getting a loan approved.

Consulting

© 2022 CRISIL Ltd. All rights reserved.

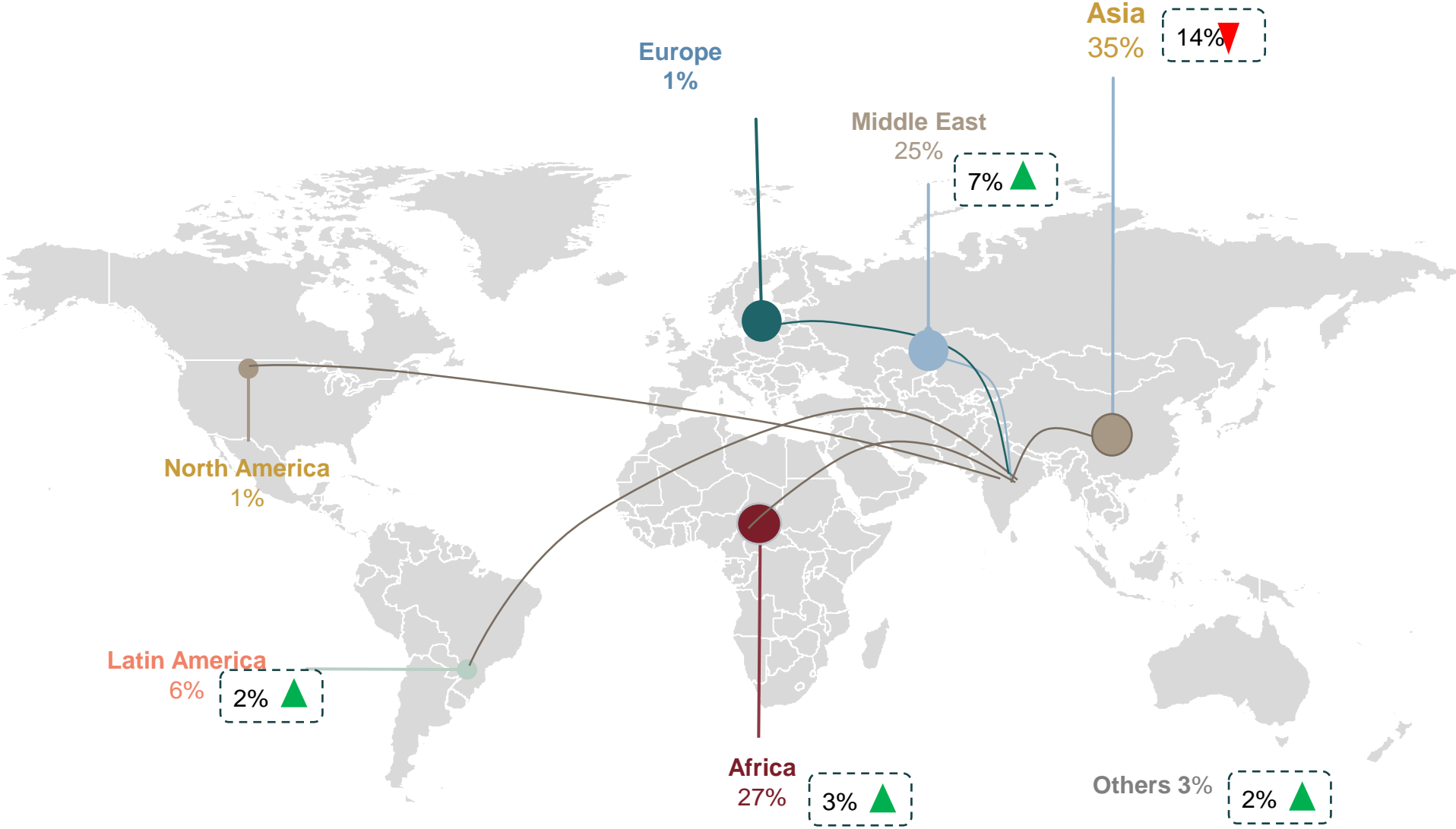
Commercial Vehicle exports

Share of LCV cargo on an uptrend



Source: SIAM, CRISIL MI&A

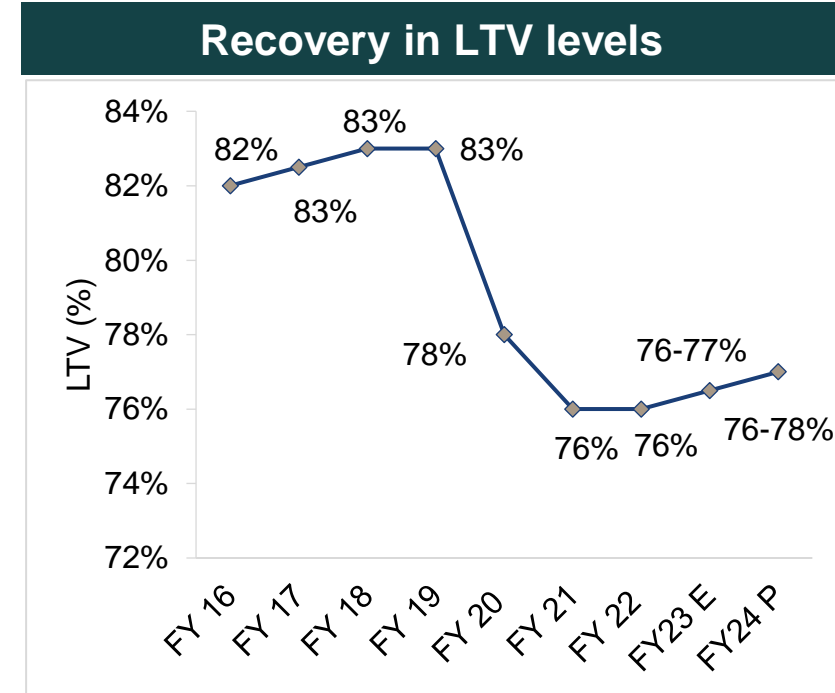
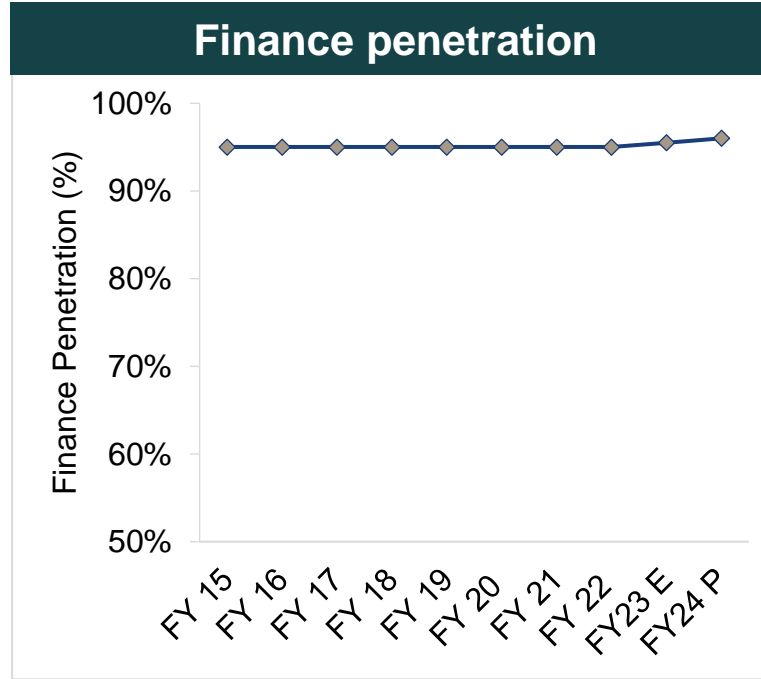
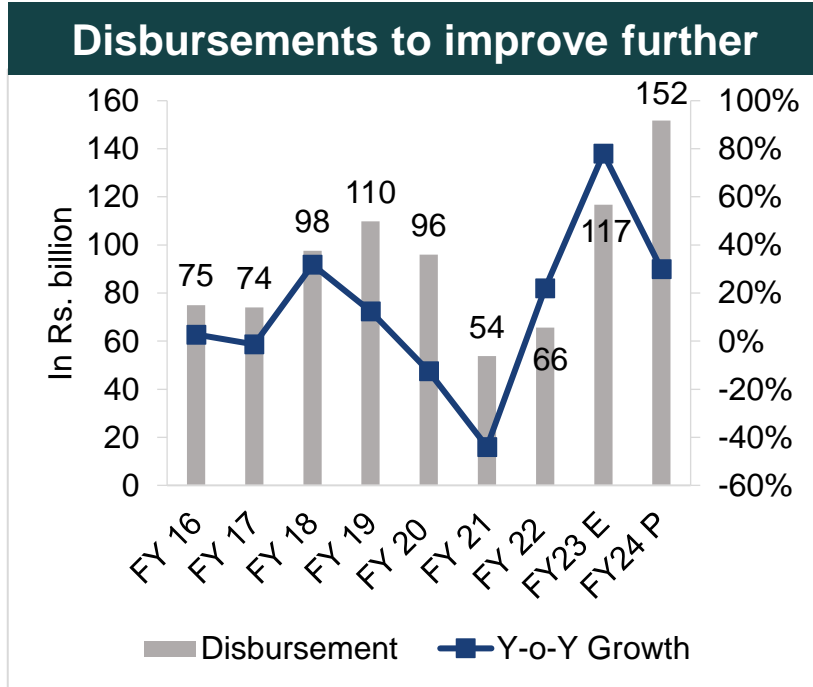
Commercial vehicles exports



- Neighboring countries Nepal & Bangladesh continue to dominate Indian exports contributing 27% in FY23 (Apr-Nov)
- Bangladesh has taken the lead during the year
- South Africa contributes to 15% of India's exports while Saudi Arabia contributes 18% to exports

Three-wheelers

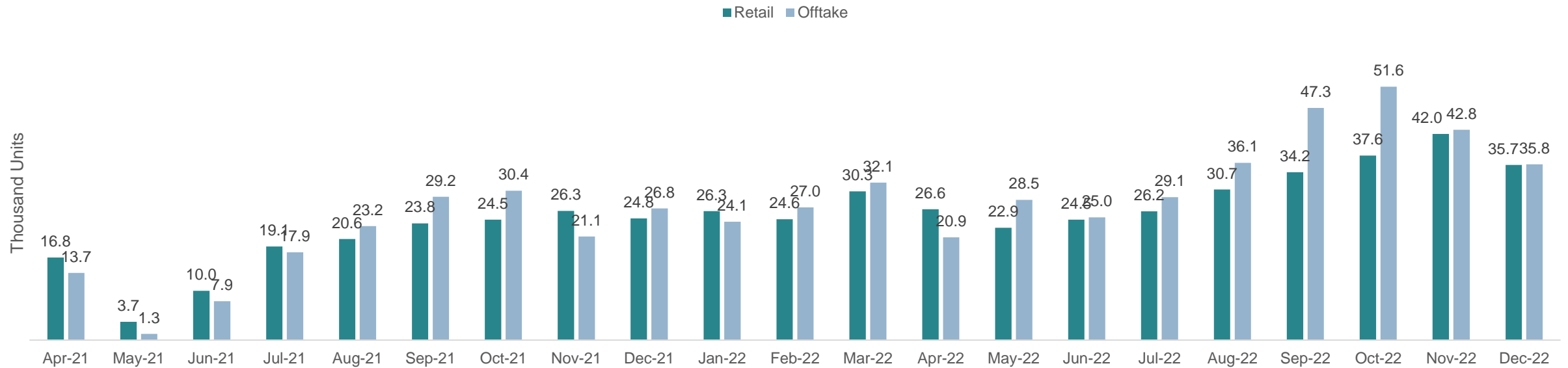
Improvement in financing scenario



- Disbursement levels are rising from the bottom of FY21 backed by gradual improvement in sales, the improvement is expected to continue during FY23
- Three-wheeler financing market is expected reach Rs ~117 billion in fiscal 2023. However, there is sizeable scope of improvement compared to the pre pandemic levels
- With estimated improvement in the 3W market, financial parameters are expected to improve going ahead
- However, lenders are still being cautious while lending to this segment

27% q-o-q improvement in retails during Q3, inventory build up continued in Oct

Retails outpaced offtake during Q3



Note: Data does not include E rickshaw & E cart numbers

Source: SIAM, Vahan, CRISIL MI&A

- Festive retail was relatively healthy with m-o-m improvement
- Industry continued to do inventory built up during October
- Some inventory correction was done during November
- After the festive increase, there was some contraction in retail during the year end in December
- Similar trend was also witnessed in the price competitive E rickshaw segment as well
- Offtake witnessed q-o-q 16% growth vis a vis 27% growth clocked by retail

Domestic – Annual forecast

| Sales | Units | Passenger | Goods | Total | EV penetration |
|---------------------|-------|-----------|---------|----------------|----------------|
| FY21 | '000 | 133 | 84 | 217 | 1% |
| <i>y-o-y growth</i> | % | -75% | -24% | -66% | |
| FY22 | '000 | 184 | 83 | 267 | 4% |
| <i>y-o-y growth</i> | % | 39% | -1% | 23% | |
| FY23E | '000 | 380-385 | 108-113 | 490-500 | 6-8% |
| <i>y-o-y growth</i> | % | 106-108% | 32-34% | 83-85% | |
| FY24P | '000 | 475-480 | 130-135 | 603-613 | 10-12% |
| <i>y-o-y growth</i> | % | 24-26% | 17-19% | 22-24% | |

Note: Includes EV 3W, does not include E Rickshaw

Source – SIAM, CRISIL MI&A

Domestic – Quarterly forecast

Consulting

| Fiscal | Quarter | Passenger | | Goods | | Total | |
|--------|---------|---------------|--------------|---------------|--------------|---------------|--------------|
| | | Sales ('000) | y-o-y growth | Sales ('000) | y-o-y growth | Sales ('000) | y-o-y growth |
| FY22 | Q1 | 16.2 | 132% | 9.4 | 59% | 25.5 | 98% |
| | Q2 | 48.5 | 83% | 25.3 | 26% | 73.8 | 58% |
| | Q3 | 61.6 | 41% | 24.0 | -18% | 85.6 | 18% |
| | Q4 | 59.2 | 6% | 24.6 | -16% | 83.9 | -1% |
| FY23 E | Q1 | 55.9 | 246% | 25.0 | 167% | 80.9 | 217% |
| | Q2 | 100.9 | 108% | 25.6 | 1% | 126.5 | 72% |
| | Q3 | 114.9 | 87% | 30.9 | 29% | 145.8 | 70% |
| | Q4 E | 108-113 | 86% | 27-32 | 19% | 137-142 | 66% |
| FY24 P | Q1 P | 68-73 | 25% | 27-32 | 17% | 97-102 | 22% |
| | Q2 P | 124-129 | 25% | 29-34 | 17% | 153-158 | 23% |
| | Q3 P | 140-145 | 25% | 33-38 | 17% | 178-183 | 23% |
| | Q4 P | 135-140 | 25% | 34-39 | 21% | 172-177 | 24% |

- Three-wheeler industry is witnessing robust growth on a low base of previous years.
- Passenger segment is performing better as compared to the goods segment as urban movement in terms of schools, colleges, business and recreational outings has increased substantially.
- Festive demand was healthy backing 90% y-o-y growth during April-Dec period
- On this high base, some deceleration is expected during FY24.

OEMs



- Growth in passenger segment to back industry growth from a low base of previous years.
- Urban movement has been growing on account of normalcy. Businesses have also witnessed good growth which has led to an uptick in employment.
- Cargo sales expected to be impacted on the back of competition from electric vehicles. Increased cost of ownership for ICE vehicles is making customers consider EV's as an option.
- Growth is expected to continue through all quarters of fiscal 2023 as well as fiscal 2024 on account of a low base and improved movement in cities.
- On a high base of FY23, some moderation is expected in FY24
- Financers are more than willing to support which will further help improve retail momentum on-ground

Dealers



- Inventory built up was done in Q2
- Festive demand was healthy during Q3, some moderation in December for year change
- Post festive sales have decreased but are better compared to last year
- Inventory correction was done in Q3
- Inventory is for 20 days which is normal as rotation in the market has increased.
- Despite fuel hike, CNG still being preferred especially in the Passenger segment
- 3W EV vehicle enquiry has increased but the product is available in limited regions.
- High traction for competitively priced E rickshaw segment

Financier

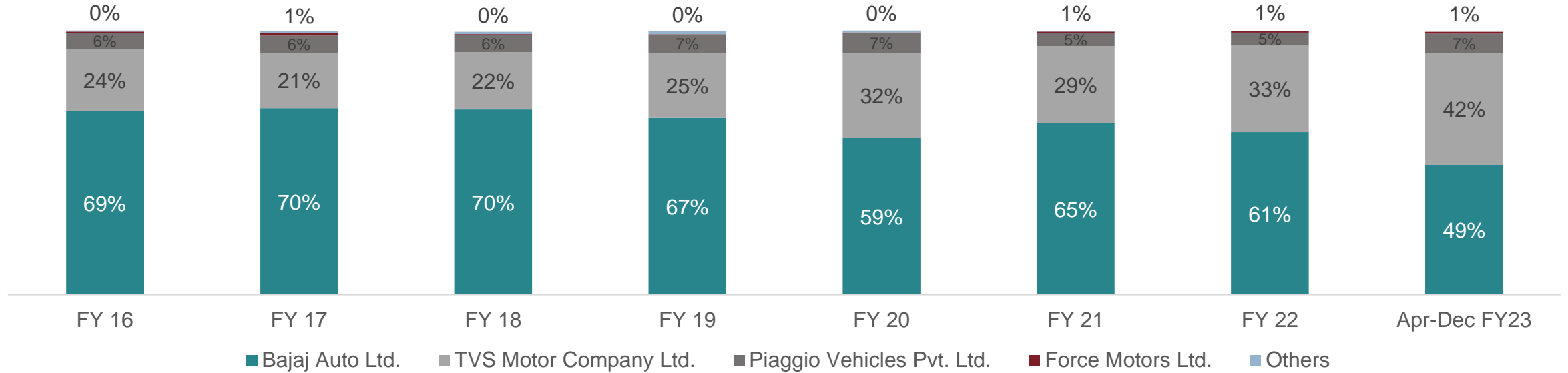


- Given the increased retail demand financiers are a bit aggressive
- Financers support is expected to improve going forward, in both the segments.
- LTV expected to be in the range of 95-100% which has increased in the near term
- Stance of the financers to remain accommodative

Three-wheeler exports

Exports contracted from the high base during YTD FY23

TVS gained further ground

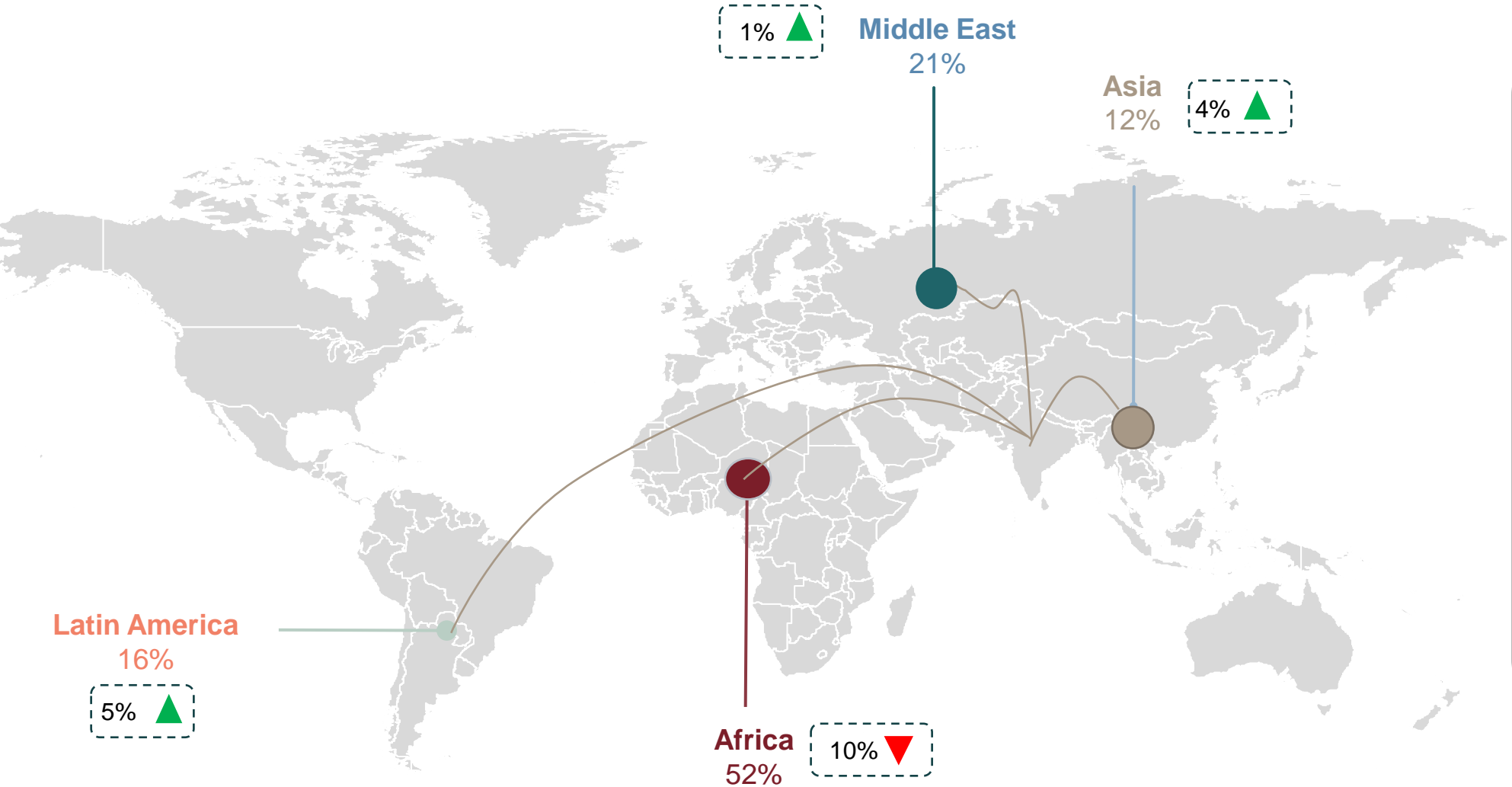


Source: SIAM, CRISIL MI&A

- FY22 witnessed sharp improvement in exports, exports grew 27% y-o-y , with smaller cargo segment registering a sharp growth of 82% y-o-y.
- On this high base, exports contracted 21% during Apr-Dec FY23 period
- Smaller cargo segment dropped at a steeper pace of 46%
- With retail sales improvement, OEMs are now focusing more on the domestic market.

© 2022 CRISIL Ltd. All rights reserved.

Three-wheeler exports



- Amidst the sluggish global macroeconomic environment, 3W exports contracted during Apr-Nov period
- Steeper fall was witnessed in African demand while Asia & LATAM countries witnessed y-o-y growth, thus restricting the contraction in overall exports
- In turn, the share of Africa dropped and gained by Asian and LATAM countries.

Tractors

Tractor demand is expected to rise in FY23 and FY24 after declining in FY22

| Parameters | Impact | | |
|--|---------------|---------------|-----------|
| | FY 22 | FY23E | FY24P |
| Farm Income** | Neutral | Favorable | Neutral |
| -- Crop Prices | Favorable | Favorable | Neutral |
| -- Crop Output | Favorable | Favorable | Neutral |
| -- Kharif Output | Neutral | Favorable | Neutral |
| -- Rabi Output | Favorable | Favorable | Neutral |
| Demand Indicators | Neutral | Neutral | Neutral |
| -- Infrastructure Development | Neutral | Favorable | Favorable |
| -- Sand Mining | Neutral | Neutral | Neutral |
| Supply side variables & financing | Favorable | Neutral | Favorable |
| -- Finance Availability | Neutral | Neutral | Favorable |
| -- Channel Inventory | Not Favorable | Not Favorable | Neutral |
| -- Player Action | Not Favorable | Neutral | Neutral |

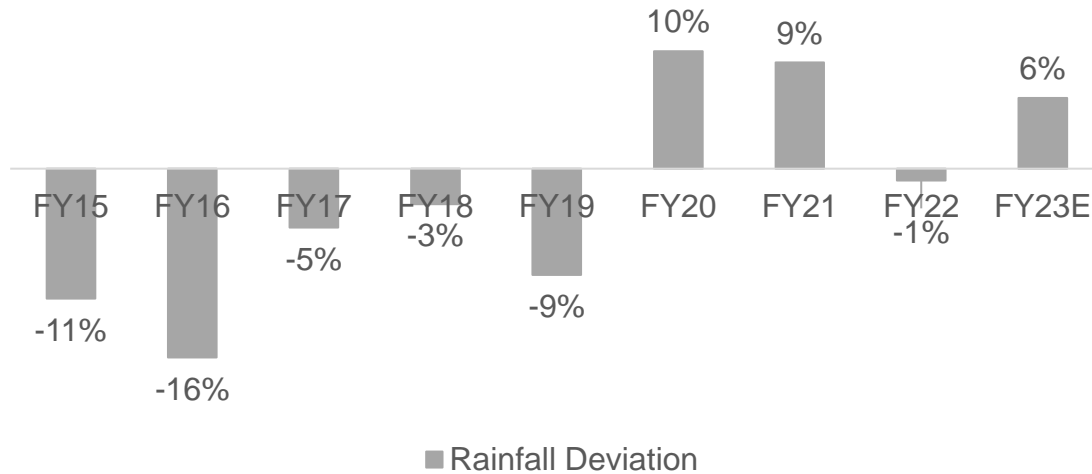


NOTE : ** FY24 assumed neutral assuming normal monsoon,

Source: CRISIL MI&A

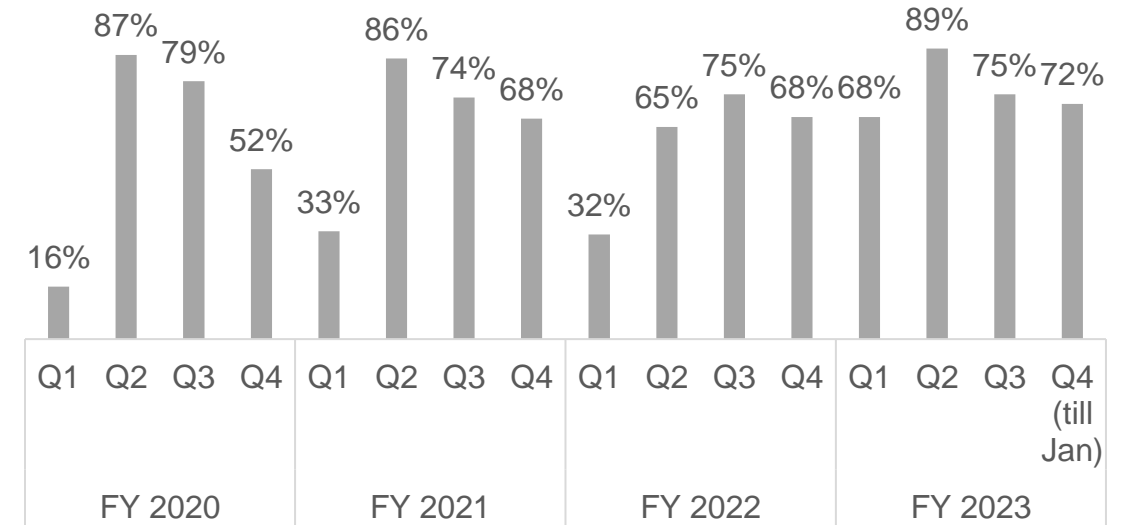
Healthy reservoir levels to result in better crop output and support good income from rabi crop

Southwest Monsoon deviation is above normal



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 MI&A

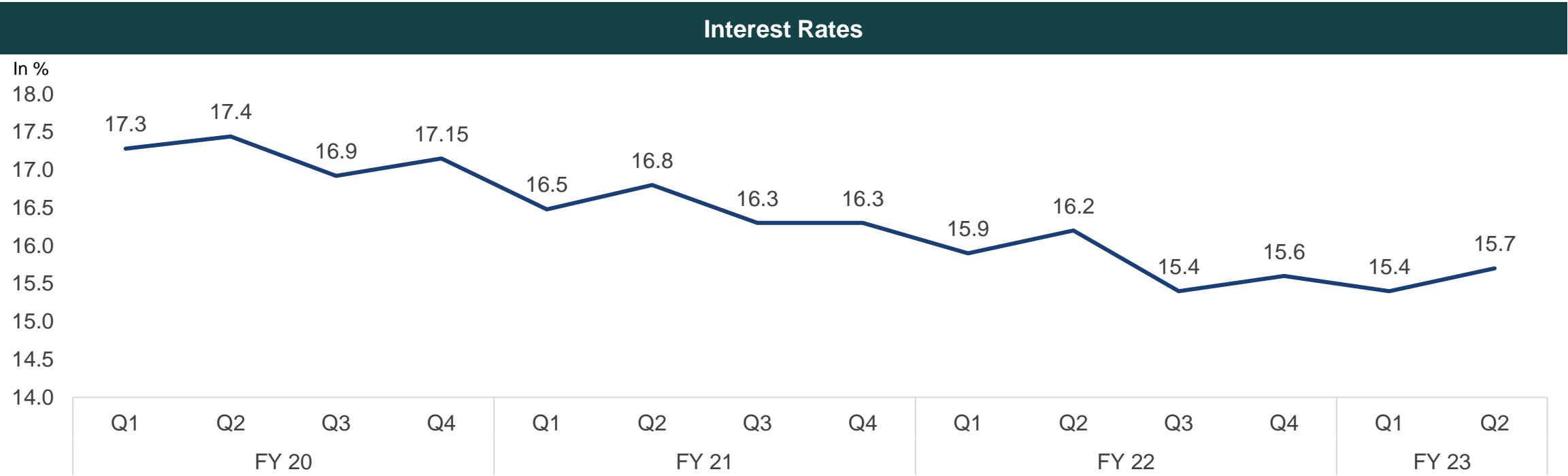
Reservoir Levels are higher



Notes: Storage Status of 143 Reservoirs of the Country

- Healthy reservoir levels, above normal monsoon and announcement of higher MSP for crops contributed towards positive farmer sentiments thereby pushing retail momentum.
- Good moisture content in the soil and positive Rabi outlook to further support demand.
- Southern & Western regions have witnessed above normal rainfall while other parts have received normal rainfall.
- The country witnessed excess rainfall during September and first half of October
- Overall healthy monsoon has improved the reservoir levels, leading to high moisture content in the soil, which is very positive for higher food grain production in the upcoming rabi season

Tractor interest rates to remain range bound

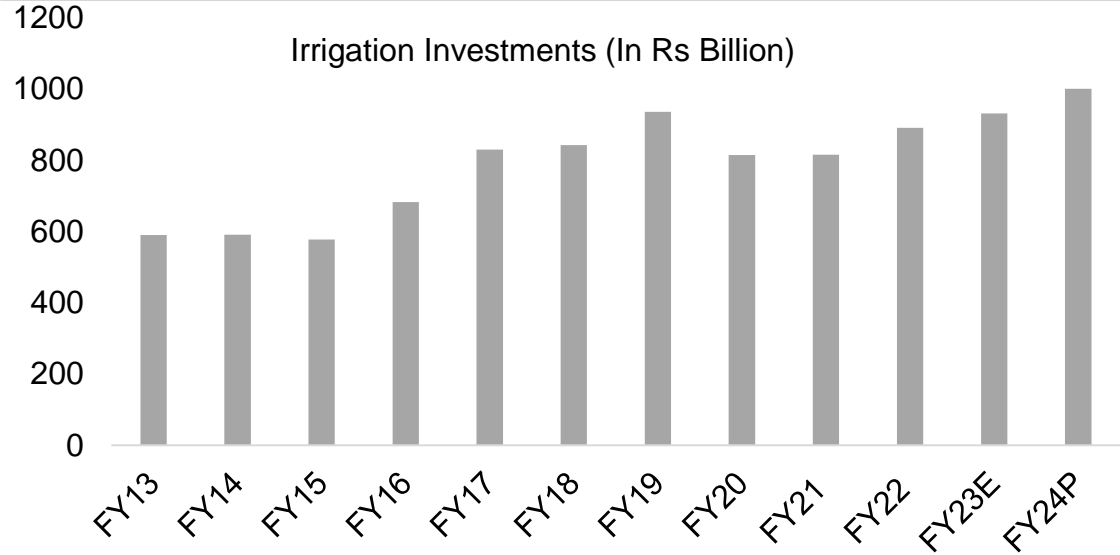


NOTE: Interest rates for Q2FY23 is not yet released by leading financiers
Source: CRISIL MI&A

- Financers are aggressive in lending.
- The Minimum support price for wheat is good, which means the farm cash flows are expected to be better.
- Overall rural market is doing extremely well and the sentiments are very positive. They expect good collections.
- We expect LTVs to increase marginally in FY24.
- The entry of private financiers over the past few years has also increased finance availability.

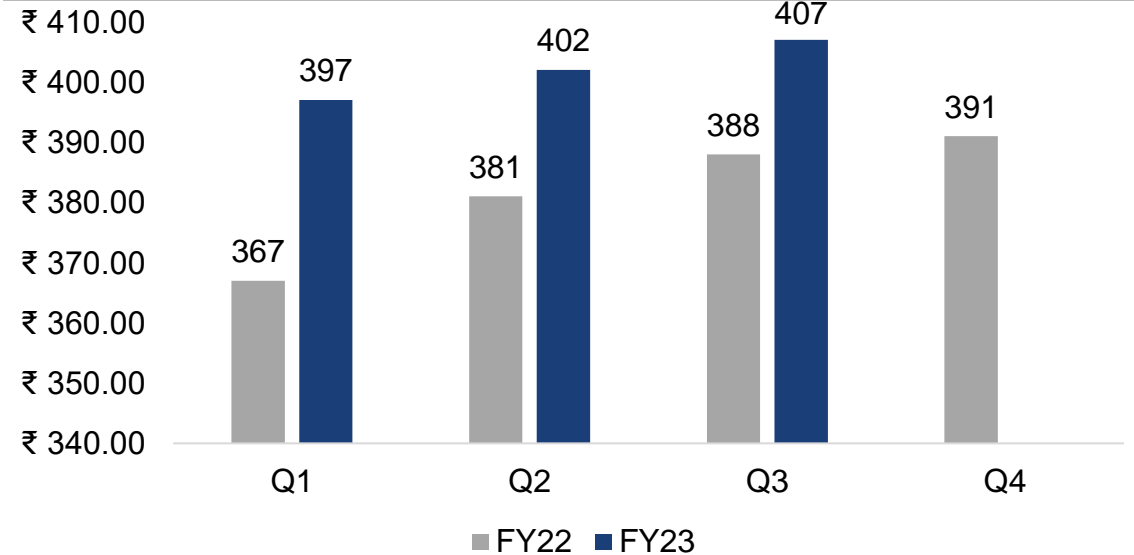
State funded irrigation construction capex to rise in FY23

Irrigation spending is expected to increase



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

Daily Rural Wage increased in Q3 FY23

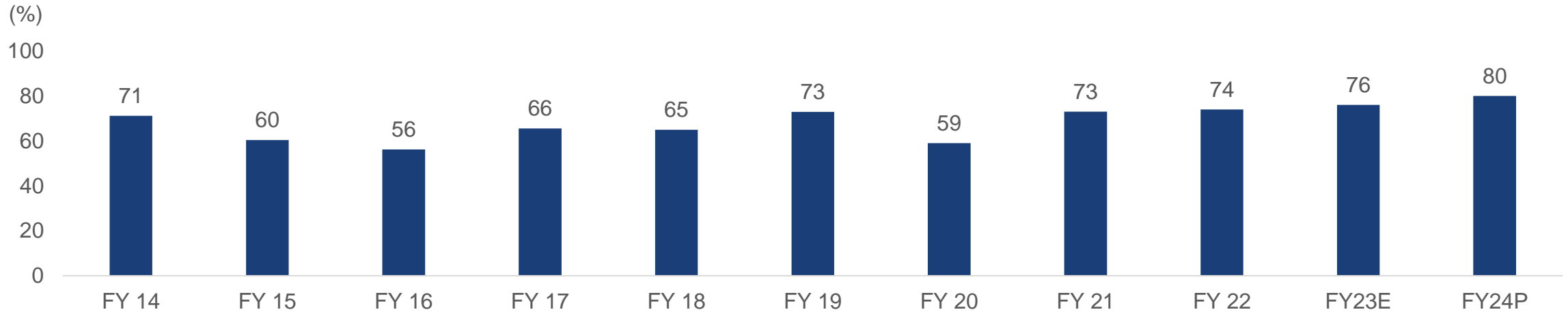


Rural wages includes general non-agricultural labour.
Source: RBI, CRISIL MI&A

- Spending in irrigation by states to increase, Centre to focus on monitoring.
- Construction spends in irrigation is projected to rise to Rs 4.3-4.5 lakh crore over fiscals 2023 to fiscal 2027 from Rs 3.2 lakh crore over the past five years (fiscal 2018 to 2022) owing to the push from state governments to increase irrigation penetration in states.
- The government has increased the spending requirement by state governments from 32% to 42%, in line with greater transfer of taxes to states.
- The central government will play an active role in monitoring the progress of PMKSY projects and has taken several steps to crystallize investments for irrigation.

Capacity utilization to improve in FY23 with improved offtake

Capacity utilization to increase



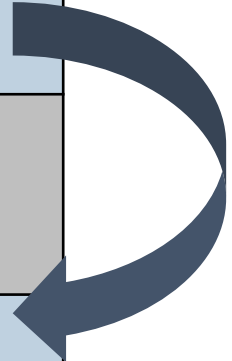
E: Estimated

Source: CRISIL MI&A

- In fiscal 2023, it is estimated that the capacity utilization of the players will increase to 76% due to higher volume growth expected in the fiscal.
- ITL, manufacturing both higher and lower horsepower tractors, is continuing to expand its overseas footprint by launching tractors in the 90-120 hp range for developed markets.
- CNH has plans of doubling its tractor manufacturing capacity to 1 lakh units. Already the capacity has been expanded to 65,000 units in April.
- By the end of 2023, CNH wants to take it up to 75,000 units, before scaling it to 1 lakh units per annum, given the fact that India will serve both the domestic market as well as exports.

TREM IV norms have come into effect from 1st January'23.

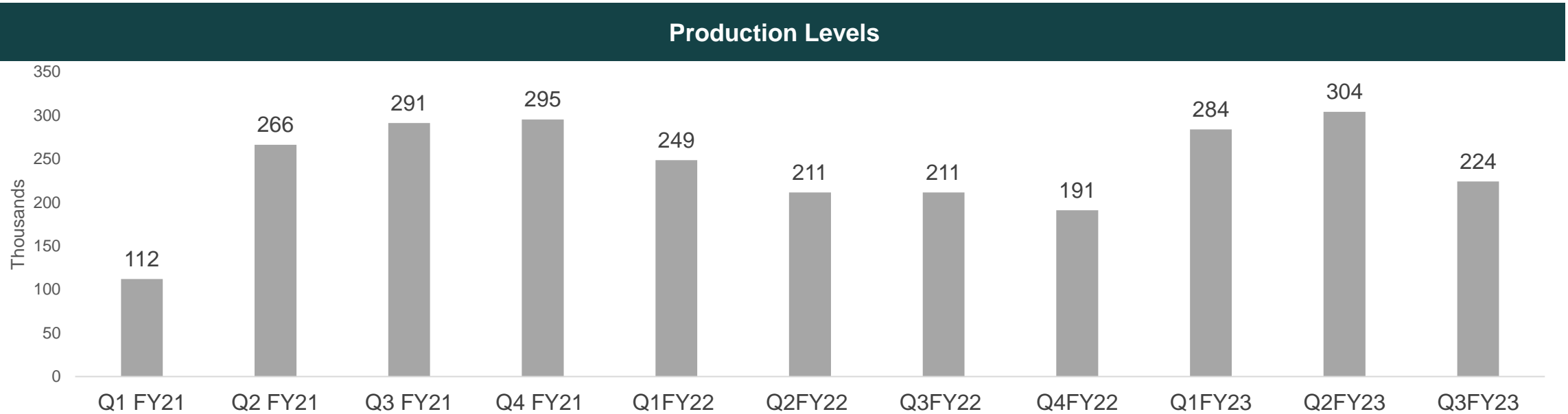
| Emission standard stage | Engine Power | Market share | Date | CO | HC+Nox | PM |
|-------------------------|--------------|--------------|----------------|-------|--------|-------|
| | HP | | | g/kWh | | |
| Trem Stage III A | 11 to 25HP | 9% | 1st April 2010 | 5.5 | 8.5 | 0.8 |
| | 25 to 50HP | 84%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



Source: Industry, CRISIL MI&A

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

Production levels are lower in Q3 due to lean months



Source: CRISIL MI&A

- Several OEMs have ramped up their production in Q2
- Retail demand remained strong during festive.
- Production levels are at 6% higher levels in Q3 FY23 in comparison to last year.
- OEMs extended schemes which were launched in the festive season to boost retail sales since these schemes saw healthy uptake during the festive season.
- Also, healthy reservoir levels, above normal monsoon and announcement of higher MSP for crops contributed towards positive farmer sentiments thereby pushing retail momentum.

Domestic – Annual & Quarterly forecast

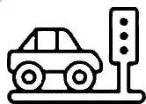
| | Units | Sales |
|---------------------|----------|-----------|
| FY22 | Millions | 0.84 |
| <i>y-o-y growth</i> | % | (6)% |
| FY23E | Millions | 0.91-0.93 |
| <i>y-o-y growth</i> | % | 8-10% |
| FY24P | Millions | 0.92-0.93 |
| <i>y-o-y growth</i> | % | (1)-1% |

| Fiscal | Quarter | Tractors | |
|--------|---------|---------------|--------------|
| | | Sales ('000) | y-o-y growth |
| FY22 | Q1 | 229 | 40% |
| | Q2 | 211 | -11% |
| | Q3 | 223 | -13% |
| | Q4 | 117 | -25% |
| FY23 E | Q1 | 265 | 16% |
| | Q2 | 217 | 3% |
| | Q3 | 247 | 11% |
| | Q4 E | 192-195 | 8-10% |
| FY24 P | Q1 P | 253-259 | (4)-(2)% |
| | Q2 P | 212-216 | (4)-(2)% |
| | Q3 P | 250-255 | 1-3% |

Source – TMA, CRISIL MI&A

- Domestic tractor demand is expected to clock 8-10% on-year growth in fiscal 2023 after declining by 6.2% on-year in fiscal 2022.
- Good crop prices at the beginning of the fiscal, healthy reservoir levels due to a above normal monsoon season and higher MSP announcement has all led to positive farmer sentiments.
- Overall Festive demand was positive this year due to various schemes and discounts offered by OEMs.
- This has supported retail growth momentum..

OEMs



- Healthy demand due to positive farmer sentiments on the back of higher crop prices, healthy reservoir levels have boosted sales.
- Rising demand of lower hp tractors with good moisture content has led to increase in sales.
- However, in States like Bihar and West Bengal erratic rainfall, slower construction activities and ban on sand mining has led to negative farmer sentiments.
- Tractor subsidies in States, like Maharashtra, has further created good delivery momentum.
- Lot of schemes and discounts offered during festive continues to boost sales further.

Dealers



- Rabi sowing has been in track with slight delay in few states.
- Rabi yield is expected to be good this time considering favorable weather conditions.
- Crop prices looks positive.
- Stock levels are very high at dealer level inventory. However, the players are in push mode and correction is not expected till March.
- Dealers are taking hit in their margins due to tractor price hikes undertaken by OEMs.
- Commercial activities are slowly resuming but there is still ban on sand mining in most of the states. Thus, commercial contribution has been lower.

Financier

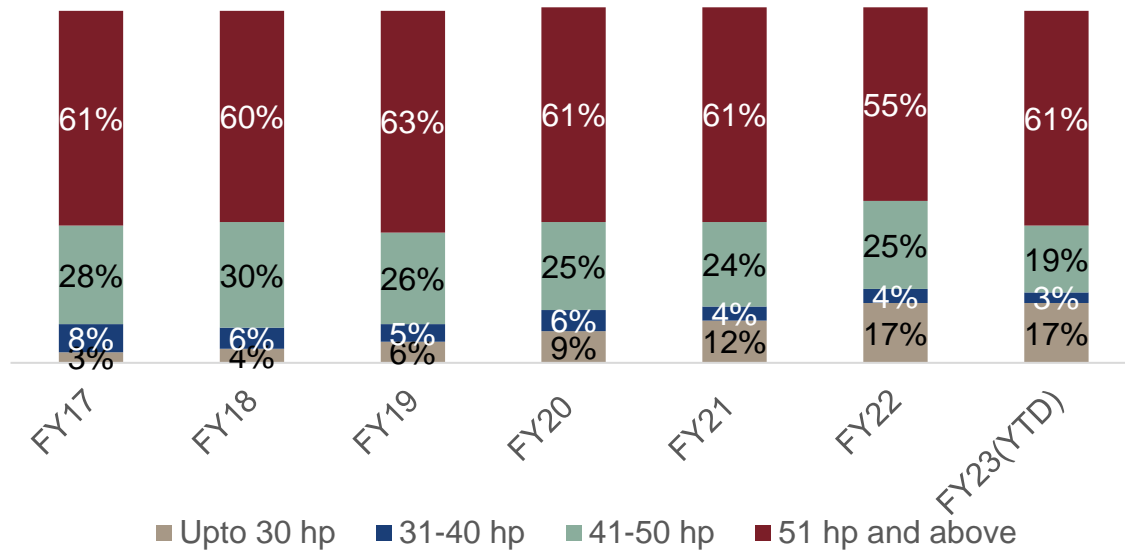


- Financing is robust with lucrative terms of credit offered during festive continues
- Disbursements to increase at a moderate pace in FY24.
- Non-performing assets are higher in public banks as compared with private banks and NBFCs.
- LTVs are estimated to have grown from 75.5% in to 76% in fiscal 2023.
- Financing situation in certain states are worrisome with rising NPA levels and is a key monitorable in the coming months as funding levels could be significantly impacted

Tractor exports

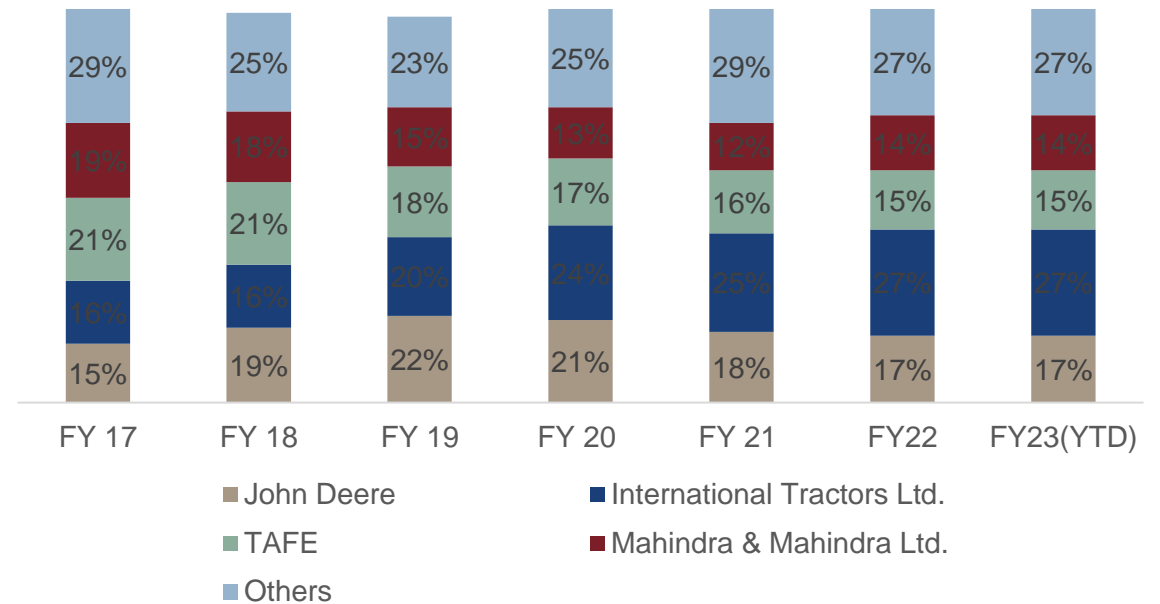
Tractor exports to rise in FY23 despite a high base of FY22

Segment wise market share of exports



Note: YTD Source: CRISIL MI&A

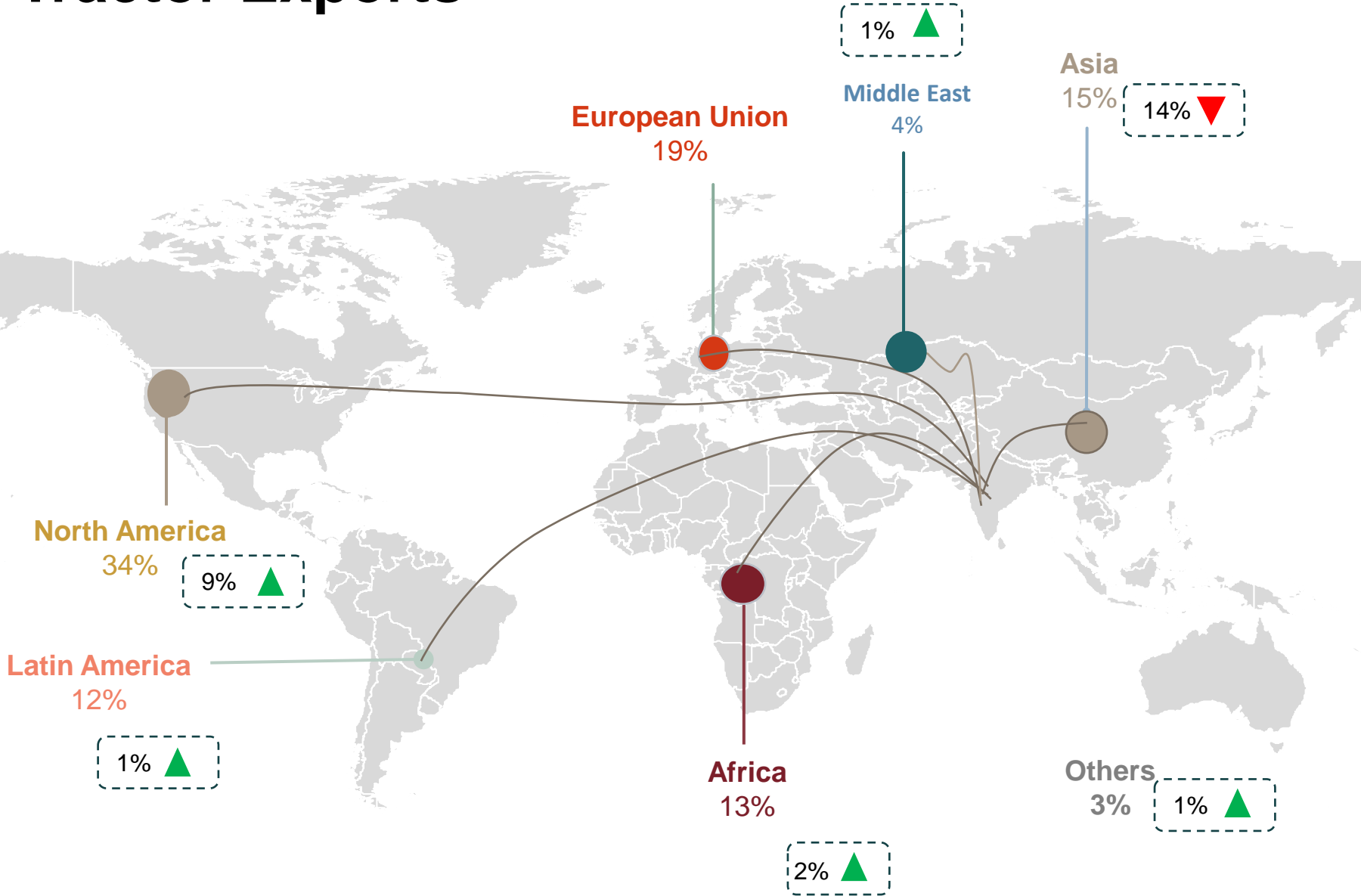
Player wise market share of exports



Source: CRISIL MI&A

- Share of exports in the overall Indian tractor market is around 13% in FY23
- Exports is estimated to grow by 2-4% on-year in fiscal 2023 over a high base of fiscal 2022.
- Demand for Indian tractors has been high in Bangladesh, the USA, Mexico and European countries.
- Export demand is expected to be slower in H2 FY23 with lower demand from the USA and Europe amidst rising inflation.
- In fiscal 2024, we expect slower growth in exports primarily anticipating slowdown in the developed economies amid rising inflation and Global recessionary outlook.

Tractor Exports



- Share of exports to North America shot up during April-Nov FY23 backed by increased demand from USA
- Exports to Asia dropped with the contraction in exports to Nepal, although exports to Bangladesh remained rangebound
- Exports to Mexico as well as Brazil increased, backing the share of Latin America in the Indian exports
- Rising demand for Indian tractors from the US, Europe, Mexico and from the neighboring Asian countries has fueled demand for higher hp tractors. John Deere is the leading player for exports in this segment followed by International Tractors Limited (ITL).

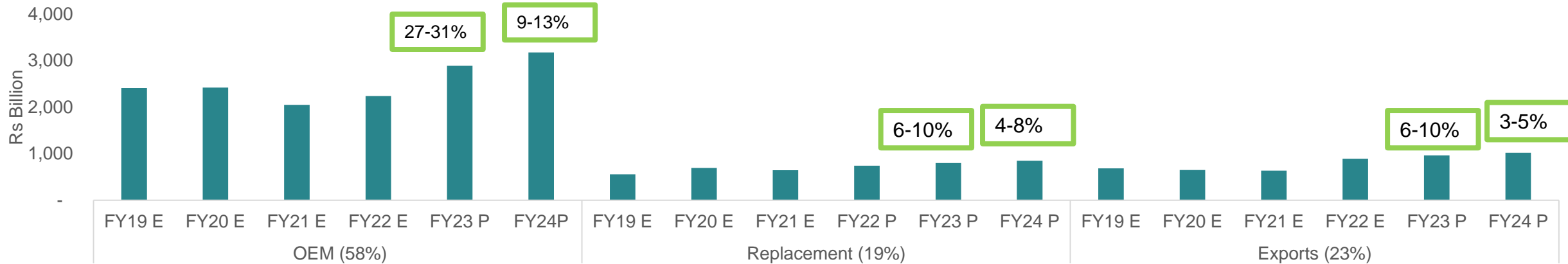
Auto Components

© 2022 CRISIL Ltd. All rights reserved.

Some deceleration in growth in FY24 from a high base of FY23

Healthy demand growth across segments to boost OEM demand in FY23

| | FY20 | FY21 | FY22 | FY23 P | FY24P |
|------------------|------|------|------|--------|--------|
| Industry revenue | -6% | -5% | 23% | 18-22% | 10-12% |



Note: Coloured brackets represent y-o-y growth; Numbers in the bracket in the axis represent share in production for FY22

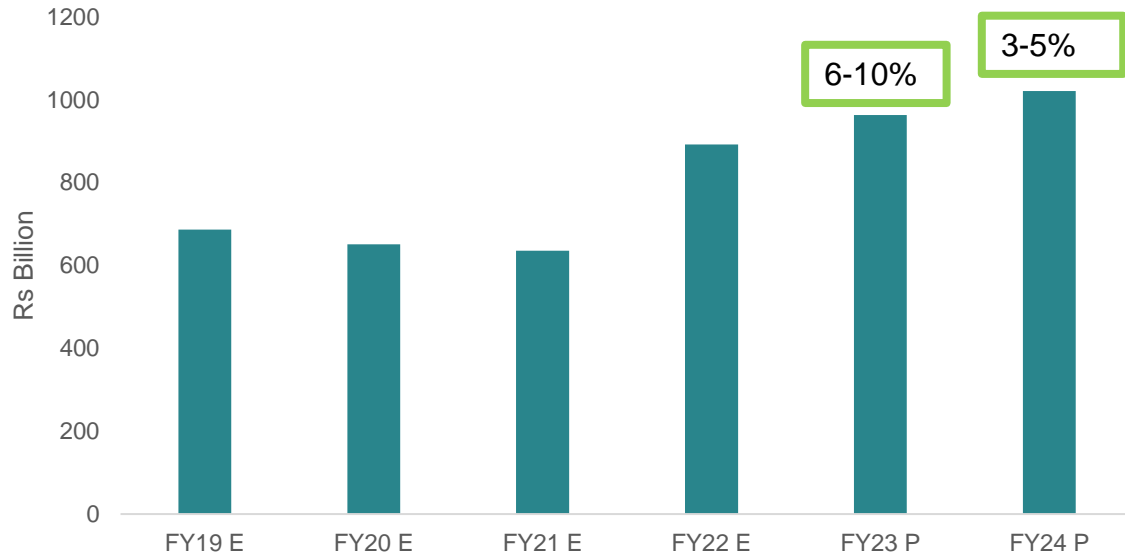
Source: CRISIL MI&A

- In fiscal 2023, the OEM segment (58% of revenues) is likely to witness robust growth; PV and CV segments to provide the thrust in fiscal 2023. On a lower base, two-wheeler and three-wheeler segments are also estimated to improve and support the component industry growth
- Exports (23% of revenues) are projected to increase by 6-10% in fiscal 2023, with high inflation and economic slowdown acting as headwinds
- Replacement demand (19% of revenues) is expected to grow by 6-10% in fiscal 2023, driven by higher vehicle movement and the high sales witnessed in FY18-19
- On this high base, demand growth rates are expected to moderate in FY24, decelerating the growth of components segment as well

© 2022 CRISIL Ltd. All rights reserved.

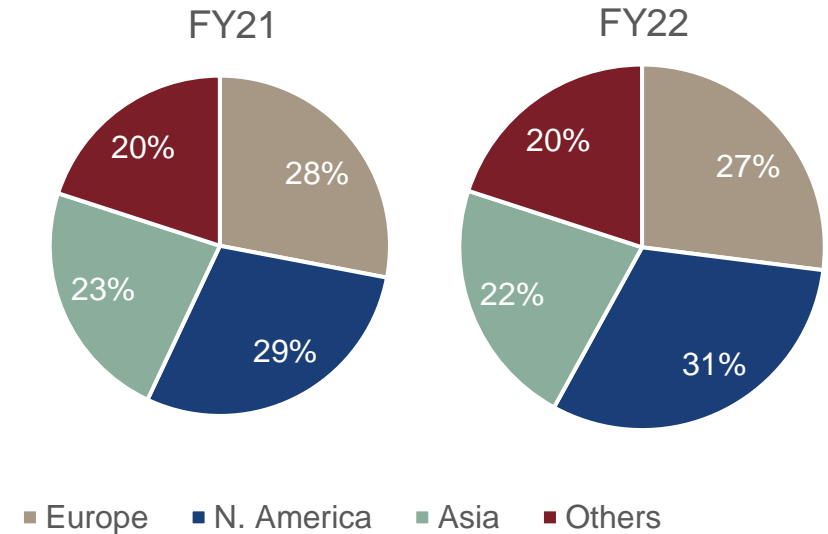
Sluggish economic growth expectation to impact export growth in FY24

Export demand expected to grow in FY 23



Note: Brackets represent y-o-y growth;
Source: CRISIL MI&A

Developed nations support exports

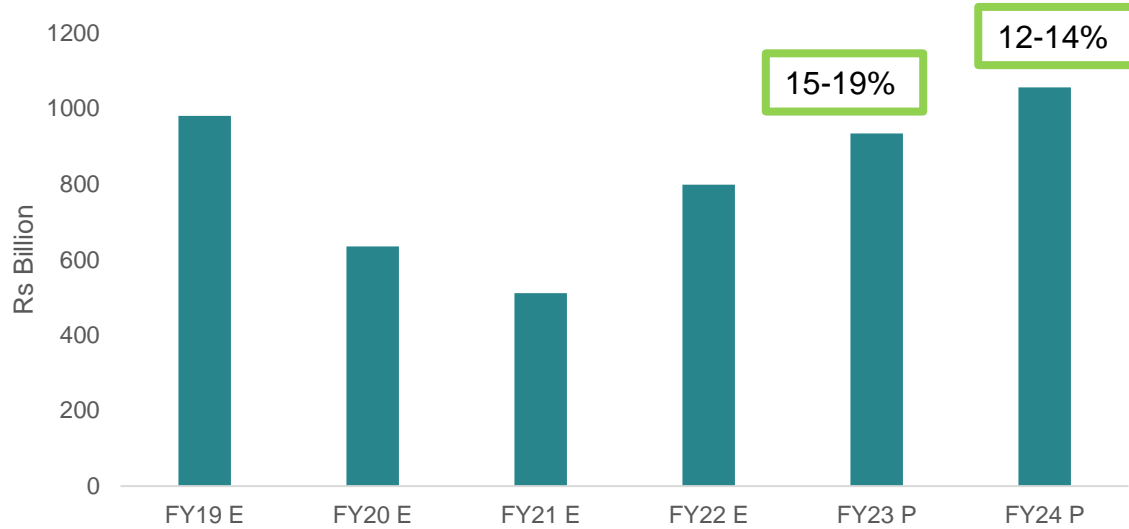


Source: DGFT, CRISIL MI&A

- Auto component exports (accounting for 23% of the overall demand in FY22) are projected to witness 6-10% growth over the high double-digit growth witnessed in FY22
- The growth would be on the back of healthy demand from North America and Europe which together contributed 58% to the export demand during FY22.
- Export revenues are also expected to be supported by the global demand and China +1 strategy.
- In FY24, on the high base of FY23, exports growth is estimated to taper down amidst the sluggish economic global growth expectations. The high inflation and global economic slowdown remain key monitorables going ahead.

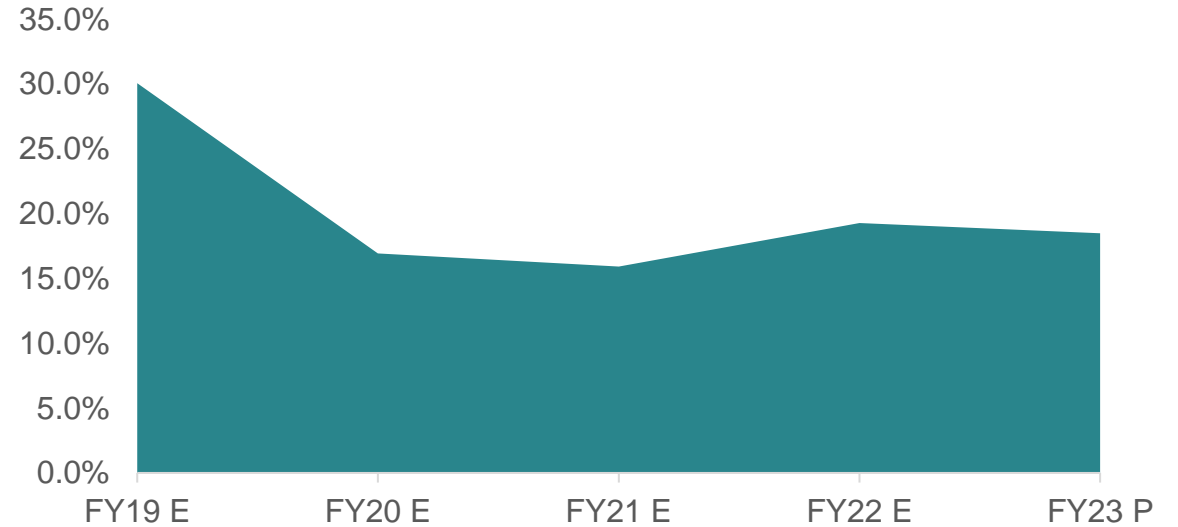
Increased traction to back higher import demand in fiscal 2023

Healthy rise in import demand during FY23



Source – DGFT, CRISIL MI&A

However, the share in consumption to subdued

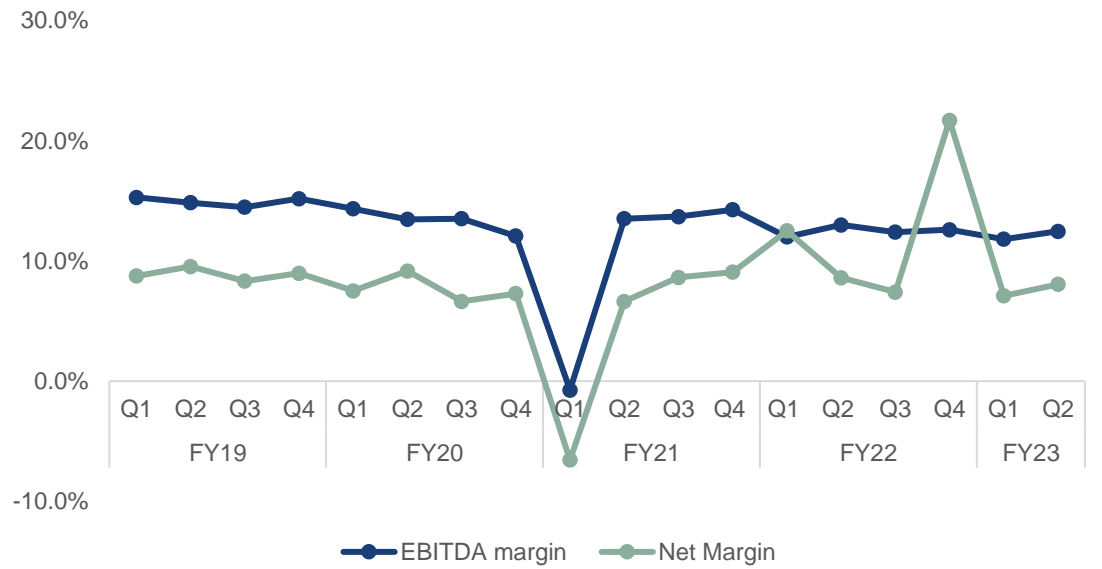
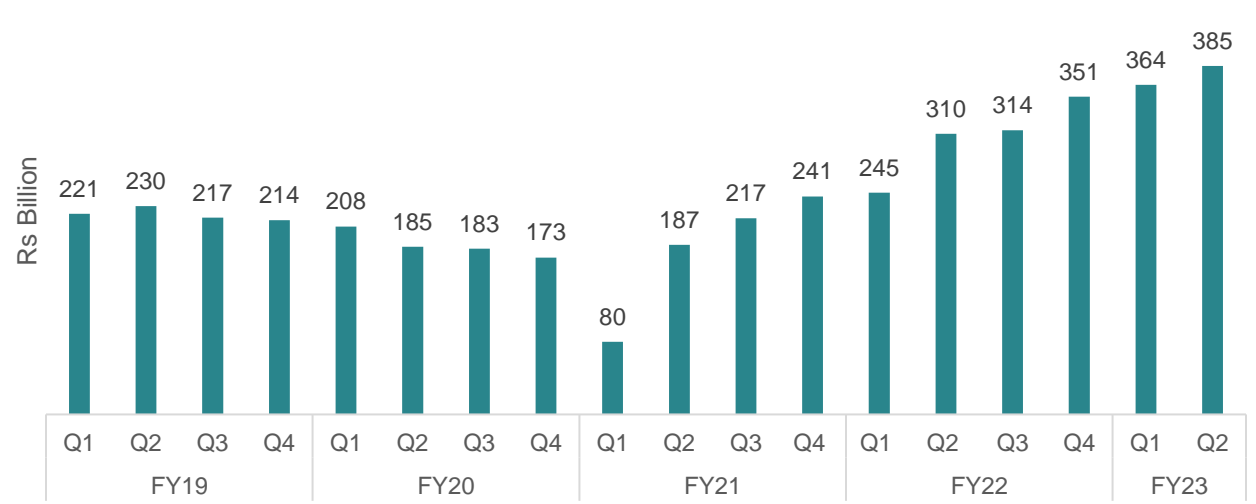


Source: DGFT, CRISIL MI&A

- Auto component imports to improve in fiscal 2023 with improving domestic vehicle production.
- Going ahead, import demand is likely to grow led by a recovery in domestic market.
- In fiscal 2023, we expect imports to increase by 15-19% amidst the increased need of components for higher domestic demand.
- However, faster domestic consumption growth of 21-25% will contract the share of imports.
- In FY24, consumption growth pace is estimated to taper down, some moderation is expected in import demand growth as well

EBITDA margins to improve in FY23 & FY24, led by correction in raw material prices

Company financials



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

Source: Company financials, CRISIL MI&A

- Gradual increase in aggregate revenue of players in the last 3 quarters backed by increased demand
- Profitability to improve in fiscal 2023 and 2024, led by a recovery in demand and correction in raw material prices
- In FY23, operating margins of auto component manufacturers to improve by ~70-100 bps due to operating leverage as well as correction in input costs.
- The basic raw material index (BRMI), which reflects ~27% of raw material costs of the industry is expected to decrease in fiscal 2023.

Thank You

© 2022 CRISIL Ltd. All rights reserved.

About CRISIL Market Intelligence & Analytics

CRISIL Market Intelligence & Analytics, a division of CRISIL, provides independent research, consulting, risk solutions, and data & analytics. Our informed insights and opinions on the economy, industry, capital markets and companies drive impactful decisions for clients across diverse sectors and geographies.

Our strong benchmarking capabilities, granular grasp of sectors, proprietary analytical frameworks and risk management solutions backed by deep understanding of technology integration, make us the partner of choice for public & private organisations, multi-lateral agencies, investors and governments for over three decades.

About CRISIL Limited

CRISIL is a leading, agile and innovative global analytics company driven by its mission of making markets function better.

It is India's foremost provider of ratings, data, research, analytics and solutions with a strong track record of growth, culture of innovation, and global footprint.

It has delivered independent opinions, actionable insights, and efficient solutions to over 100,000 customers through businesses that operate from India, the US, the UK, Argentina, Poland, China, Hong Kong, UAE and Singapore.

It is majority owned by S&P Global Inc, a leading provider of transparent and independent ratings, benchmarks, analytics and data to the capital and commodity markets worldwide.

For more information, visit www.crisil.com

Connect with us: [LINKEDIN](#) | [TWITTER](#) | [YOUTUBE](#) | [FACEBOOK](#) | [INSTAGRAM](#)

CRISIL Privacy Notice

CRISIL respects your privacy. We may use your personal information, such as your name, location, contact number and email id to fulfil your request, service your account and to provide you with additional information from CRISIL. For further information on CRISIL's privacy policy please visit www.crisil.com/privacy.

© 2022 CRISIL Ltd. All rights reserved.