

CarTrade Tech | BUY

Auto supply normalisation to drive ads and lead generation

New Auto in India witnessed an unprecedented supply-demand mismatch due to COVID. This was induced by demand for cars rising sharply due to safety concerns as buyers shunned public transport while supply got disrupted by [labour shortage](#) first, followed by [chip shortage](#). With [chip shortage easing in FY24](#) and automakers fulfilling the pent-up demand, we seem to finally be reaching a normalised state with reported inventory of around 45-50 days ([Exhibit 1](#)), similar to pre-COVID levels. As highlighted in our [reports earlier](#), OEMs did lower their ad budgets due to their inability to service the existing demand. With supply normalising, we expect OEM ad budgets as well as dealer lead buying to grow faster than auto industry revenue growth in FY25. Furthermore, we reiterate expectations of sustained rebound in Remarketing segment while OLX would benefit from picking low-hanging fruits such as ads integration, price hikes and integration with Carwale classifieds. We roll forward to Jun'25 and reiterate 'BUY' with a TP of INR 1,120 (~45% upside), expecting the stock to sustain strength with long-term secular tailwinds.

- Dealer level inventory at pre-COVID levels:** As per data released by Federation of Automotive Dealers Associations (FADA), there was 50-55 days of average passenger vehicle (PV) inventory with the dealers as of Feb'24. Our analysis basis retail sales vs wholesale sales data suggests roughly 50 days of inventory with dealers as of May'24. This is similar to pre-COVID levels of 45 days, implying a more normalised supply-demand scenario. It needs to be noted that retail sales in YTD FY25 still remain higher by ~8% YoY, suggesting sustained demand strength and worries about a slowdown in Indian auto is a bit premature. Such a scenario with normalised inventory level along with unrelenting demand will result in OEMs spending more on advertising, helping stronger growth in CarTrade's new auto segment.
- OEM ad spends to revert to 2.5% of revenue:** With most PV make-models on waiting periods exceeding a couple of months due to supply constraints, auto industry lowered their ad spends (as % of revenue) to ~2% in FY22. This was substantially lower than pre-COVID steady-state of 2.5%. Data from the six listed OEMs suggests ad spends in FY23 to have been lower by 40bps/120bps in 2W/PV OEMs vs FY19 numbers. The sharpest dip (209bps) was seen in Mahindra & Mahindra, expectedly as the OEM saw the lengthiest waiting periods on popular models such as XUV700 and Thar. Our industry checks suggest FY24 ad spends have increased slightly to 2.1% but an upsurge is anticipated with ad budgets rising sharply in comparison to the new auto value growth in FY25-26.
- Reiterate 'BUY' with Jun'25 TP of INR 1,120, ~10% higher than our previous TP:** We roll forward to Jun'25 while valuing CarTrade using a SoTP based valuation to arrive at a TP of INR 1,120 (~45% upside) with 22x / 14x / 25x Jun'26E EBITDA multiple for New Auto / Remarketing / OLX Classifieds business. These multiples compare favourably to companies with similar business models but lower growth. On a consolidated basis, our TP implies 36X FY26E PE multiple, considerably low for a company with revenue growth of ~20% with steady-state EBITDA margins of 30-40%.



Sachin Dixit
sachin.dixit@jmfl.com | Tel: (91 22) 66303078

Swapnil Potdukhe
swapnil.potdukhe@jmfl.com | Tel: (91 22) 62241876

Atul Borse
atul.borse@jmfl.com | Tel: (91 22) 66303134

Eksha Modi
eksha.modi@jmfl.com | Tel: (91 22) 66303054

Recommendation and Price Target

Current Reco.	BUY
Previous Reco.	BUY
Current Price Target (12M)	1,120
Upside/(Downside)	45.1%
Previous Price Target	1,020
Change	9.8%

Key Data – CARTRADE IN

Current Market Price	INR772
Market cap (bn)	INR37.1/US\$0.4
Free Float	100%
Shares in issue (mn)	46.9
Diluted share (mn)	50.9
3-mon avg daily val (mn)	INR406.6/US\$4.9
52-week range	974/422
Sensex/Nifty	74,382/22,620
INR/US\$	83.4

Price Performance

%	1M	6M	12M
Absolute	4.9	5.1	61.3
Relative*	4.2	-1.6	36.2

* To the BSE Sensex

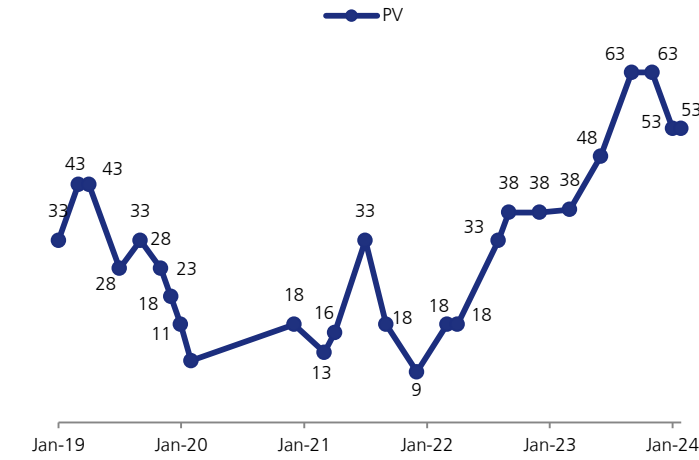
Financial Summary	(INR mn)				
Y/E March	FY23A	FY24A	FY25E	FY26E	FY27E
Net Sales	3,637	4,899	6,723	8,062	9,638
Sales Growth (%)	16.3	34.7	37.2	19.9	19.6
EBITDA	330	793	1,367	2,027	2,843
EBITDA Margin (%)	9.1	16.2	20.3	25.1	29.5
Adjusted Net Profit	340	143	1,153	1,575	2,157
Diluted EPS (INR)	6.7	2.8	22.7	31.0	42.4
Diluted EPS Growth (%)	0.0	-58.1	706.3	36.6	36.9
ROIC (%)	0.2	2.5	4.9	7.3	10.3
ROE (%)	1.7	0.7	5.4	6.9	8.6
P/E (x)	117.3	280.1	34.7	25.4	18.6
P/B (x)	1.8	1.8	1.7	1.6	1.4
EV/EBITDA (x)	86.4	41.5	23.5	15.1	10.1
Dividend Yield (%)	0.0	0.0	0.0	0.0	0.0

Source: Company data, JM Financial. Note: Valuations as of 05/Jun/2024

JM Financial Research is also available on:
Bloomberg - JMFR <GO>,
Thomson Publisher & Reuters,
S&P Capital IQ, FactSet and Visible Alpha

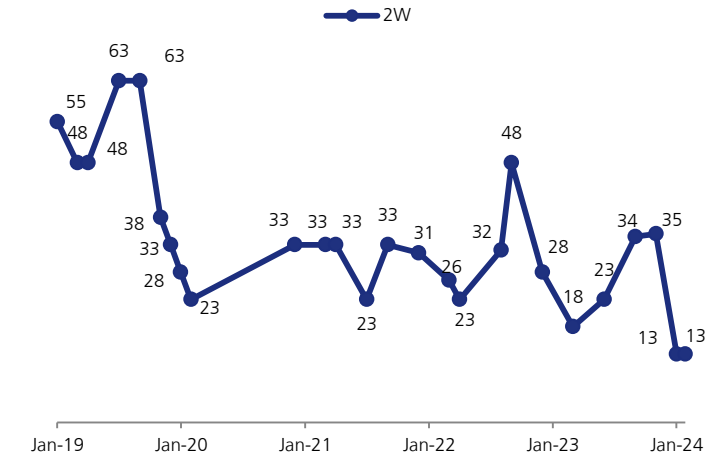
Please see Appendix I at the end of this report for Important Disclosures and Disclaimers and Research Analyst Certification.

Exhibit 1. Average dealer inventory for Passenger Vehicles



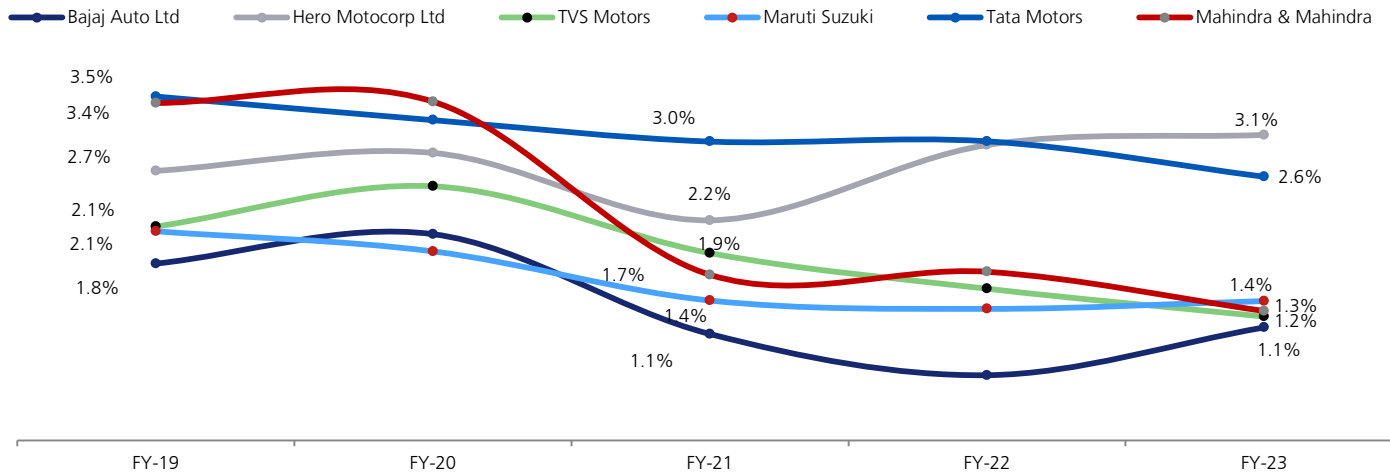
Source: Federation of Automobile Dealers Associations press release

Exhibit 2. Average dealer inventory for Two Wheelers



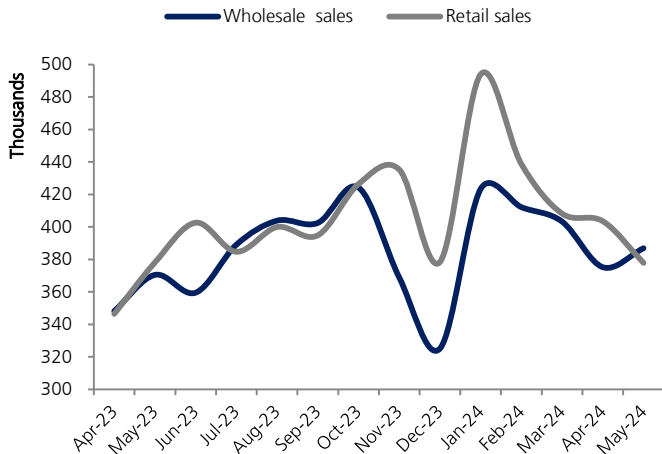
Source: Federation of Automobile Dealers Associations press release

Exhibit 3. Ad-spends (as % revenue) dipped across OEMs with M&M seeing the sharpest dip due to the longest waiting periods on its popular models such as XUV700 and Thar



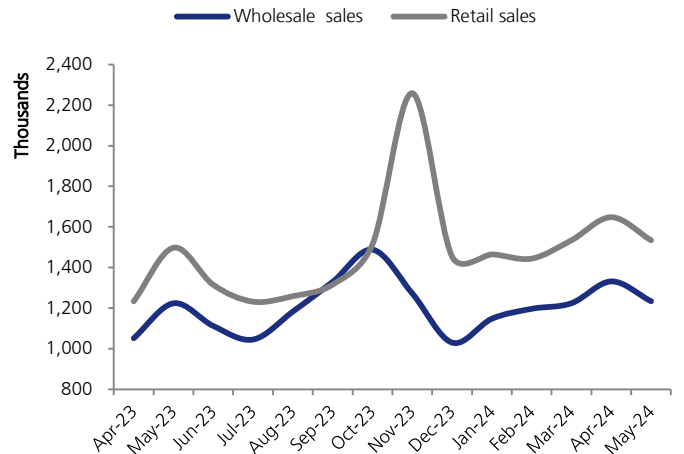
Source: Company annual reports, JM Financial

Exhibit 4. PV retail sales have consistently been higher than wholesale sales since Oct'23



Source: SIAM, FADA, JM Financial

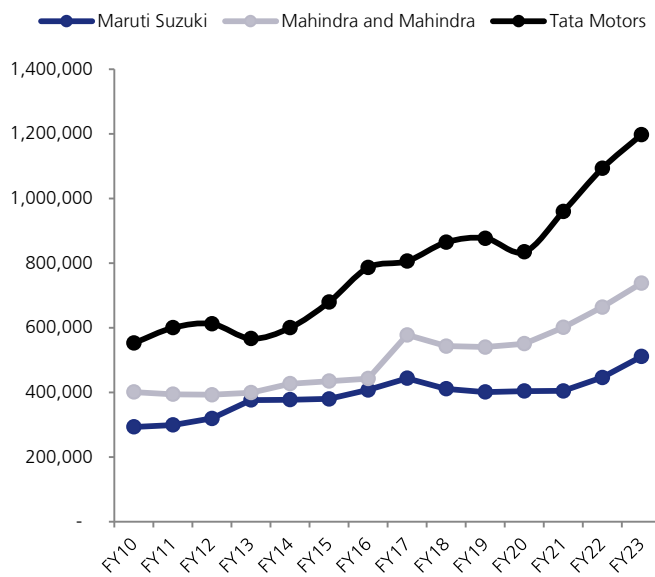
Exhibit 5. 2W retail sales have sustainably been higher than wholesale sales resulting in 2 weeks of inventory at dealers



Source: SIAM, FADA, JM Financial

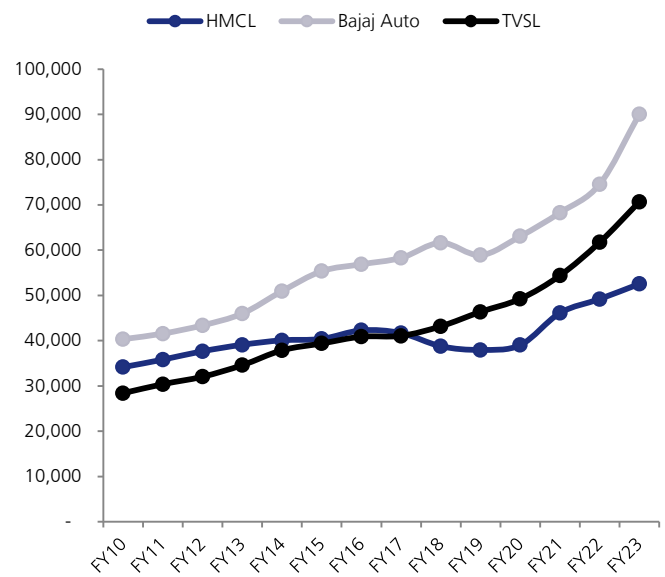
- **New Auto can sustain robust long-term growth:** While auto industry can be expectedly cyclical depending on the macroeconomic environment, the industry has long-term secular tailwinds. Considering just 24 cars per 1000 people in the country in comparison to 250 / 800 in China / the USA, there remains huge headroom for growth. Furthermore, India is also seeing a strong premiumisation play in auto with higher mix from premium cars, driving sharper value growth in new auto. While PV volume has recovered to above pre-COVID peak, 2W market has been stagnant with green shoots emerging in FY24. As expectations of a good monsoon set in, we expect 2W to continue being strong over the coming year as well with even sharper premiumisation play compared to PV.

Exhibit 6. New car prices have risen at 4-6% CAGR with Tata Motors advancing post COVID (in INR)



Source: Industry

Exhibit 7. New 2W prices have risen at 3-7% CAGR with Bajaj leading the pack while HMCL has been slowest (in INR)



Source: Industry

Exhibit 8. Auto digital advertising market to reach INR 64bn by FY29

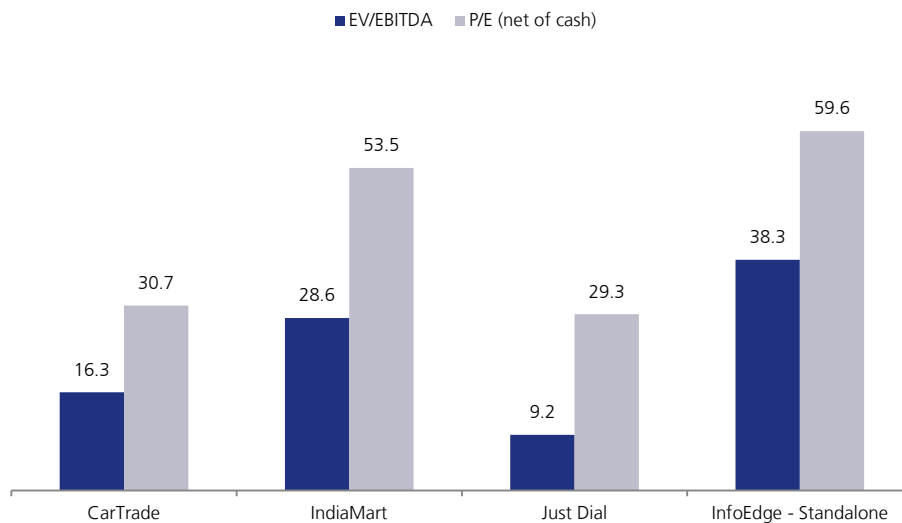
New Auto TAM	FY24	FY29	CAGR
New Car Sales (# Mn)	4.2	5.9	6.8%
New Bike Sales (# Mn)	18.0	26.9	8.4%
ASP - New Car (INR Lacs exc. GST)	6.1	7.6	4.4%
ASP - New Bike (INR '000s exc. GST)	57.0	71.3	4.6%
Total New Auto GMV (INR Bn)	3,597	6,351	12.0%
Advertisement Spend (% GMV)	2.1%	2.5%	3.5%
Advertising Spend (INR Mn)	75,539	1,58,763	16.0%
Digital Share (%)	29.0%	40.0%	6.6%
Digital Advertising Size (INR Mn)	21,906	63,505	23.7%

Source: Industry, JM Financial

- **Remarketing continues to bottom out:** CarTrade's Remarketing segment grew 14% sequentially in Q4FY24. Though there is certain seasonality in Q4, our channel checks suggest that repossessions have continued to be stable in the current quarter as well. With the company also having built a retail business as well, recovery in repossessions can drive high-teens growth in FY25, simultaneously driving strong operating leverage.
- **OLX Classifieds to have easy pickings over the next few quarters:** MCA data suggests that OLX domestic classifieds business grew at 30%+ FY18-22 CAGR. With management reiterating ~20% medium-term growth for this business, we believe growth could be 20%+ in FY25/26 driven by easy pickings such as ads integrations, overdue pricing hikes and synergies with Carwale classifieds.

- **OLX commands a monopolistic position in pre-owned horizontal classifieds:** Quikr was the first-mover in India's pre-owned horizontal classifieds market but the company has seen revenue dip by ~75% over FY19-23 and has [become irrelevant from competitive perspective](#). This has resulted in OLX now being the go-to platform for used items classifieds across categories such as auto, real estate, mobiles, electronics and many more. With Naspers investing heavily in brand marketing during the initial 4-5 years of entering India, OLX has a robust brand recall with customers across different city tiers driving organic traffic to the platform. As seen in case of Naukri, monopolistic classifieds platforms can generate robust profitability margins due to the strong negotiating power and customer stickiness.
- **Investors should be prepared for seasonal margin dip in Q1:** Across its business segments, CarTrade has a fixed cost structure with hikes getting delivered in April. As revenue generally dips vis-à-vis Q4 due to seasonality with wage hikes resulting in a step rise in costs in April, EBITDA margins do see a severe sequential dip. However, it needs to be noted that costs rise marginally across the year, resulting in robust margin recovery across the coming quarters. In Q1FY24, Adj. EBITDA margin dipped by 820bps sequentially but recovered by 1150bps over the next 3 quarters to reach 23.2% in Q4FY24.

Exhibit 9. CarTrade's current valuation is considerably attractive with similar growth



Source: Company, Bloomberg, JM Financial

Exhibit 10. 45%+ upside makes the stock highly attractive at CMP

	Revenue	EBITDA	Valuation
Website Services (Classifieds) - FY26	2.9	0.9	
Target EV/EBITDA multiple		22.0x	20.3
Commission Income (B2B) - FY26	2.6	0.6	
Target EV/EBITDA multiple		14.0x	4.6
OLX Classifieds - FY26	2.7	0.9	
Target EV/EBITDA multiple		25.0x	21.9
Implied Enterprise value (INR bn) on TP date			46.9
Net Debt (INR bn) on TP Date			-10.1
Market value (INR bn) on TP date			57.0
Diluted equity shares (mn)			51.0
1-year forward target price			1,120

Source: Company, JM Financial

Financial Tables (Consolidated)

Income Statement		(INR mn)				
Y/E March	FY23A	FY24A	FY25E	FY26E	FY27E	
Net Sales	3,637	4,899	6,723	8,062	9,638	
Sales Growth	16.3%	34.7%	37.2%	19.9%	19.6%	
Other Operating Income	0	0	0	0	0	
Total Revenue	3,637	4,899	6,723	8,062	9,638	
Cost of Goods Sold/Op. Exp	65	0	0	0	0	
Personnel Cost	2,053	2,461	3,088	3,487	3,936	
Other Expenses	1,190	1,646	2,269	2,548	2,859	
EBITDA	330	793	1,367	2,027	2,843	
EBITDA Margin	9.1%	16.2%	20.3%	25.1%	29.5%	
EBITDA Growth	0.0%	140.4%	72.3%	48.3%	40.3%	
Depn. & Amort.	287	374	369	380	421	
EBIT	43	419	998	1,647	2,423	
Other Income	640	654	585	686	814	
Finance Cost	77	92	65	78	90	
PBT before Excep. & Forex	606	980	1,518	2,255	3,146	
Excep. & Forex Inc./Loss(-)	0	0	0	0	0	
PBT	606	980	1,518	2,255	3,146	
Taxes	201	159	252	528	792	
Extraordinary Inc./Loss(-)	0	-622	0	0	0	
Assoc. Profit/Min. Int.(-)	64	57	113	152	197	
Reported Net Profit	340	143	1,153	1,575	2,157	
Adjusted Net Profit	340	143	1,153	1,575	2,157	
Net Margin	9.3%	2.9%	17.2%	19.5%	22.4%	
Diluted Share Cap. (mn)	50.7	50.9	50.9	50.9	50.9	
Diluted EPS (INR)	6.7	2.8	22.7	31.0	42.4	
Diluted EPS Growth	0.0%	-58.1%	706.3%	36.6%	36.9%	
Total Dividend + Tax	0	0	0	0	0	
Dividend Per Share (INR)	0.0	0.0	0.0	0.0	0.0	

Source: Company, JM Financial

Balance Sheet		(INR mn)				
Y/E March	FY23A	FY24A	FY25E	FY26E	FY27E	
Shareholders' Fund	20,434	20,700	22,037	23,806	26,165	
Share Capital	468	469	469	469	469	
Reserves & Surplus	20,434	20,700	22,037	23,806	26,165	
Preference Share Capital	0	0	0	0	0	
Minority Interest	790	869	982	1,133	1,331	
Total Loans	864	1,125	1,493	1,770	2,092	
Def. Tax Liab. / Assets (-)	-581	-559	-559	-559	-559	
Total - Equity & Liab.	21,508	22,134	23,952	26,150	29,029	
Net Fixed Assets	10,422	14,891	15,005	15,046	15,275	
Gross Fixed Assets	1,654	1,976	2,216	2,387	2,752	
Intangible Assets	9,103	13,301	13,235	13,172	13,109	
Less: Depn. & Amort.	335	385	447	512	586	
Capital WIP	0	0	0	0	0	
Investments	9,854	5,100	5,100	5,100	5,100	
Current Assets	2,576	4,548	6,955	9,606	12,870	
Inventories	0	0	0	0	0	
Sundry Debtors	516	733	944	1,022	1,276	
Cash & Bank Balances	279	995	2,274	4,265	6,576	
Loans & Advances	33	0	0	0	0	
Other Current Assets	1,749	2,821	3,736	4,318	5,018	
Current Liab. & Prov.	1,344	2,404	3,106	3,602	4,216	
Current Liabilities	216	348	395	444	503	
Provisions & Others	1,128	2,057	2,711	3,158	3,713	
Net Current Assets	1,232	2,144	3,848	6,004	8,654	
Total - Assets	21,508	22,134	23,952	26,150	29,029	

Source: Company, JM Financial

Cash Flow Statement		(INR mn)				
Y/E March	FY23A	FY24A	FY25E	FY26E	FY27E	
Profit before Tax	606	359	1,518	2,255	3,146	
Depn. & Amort.	287	390	369	380	421	
Net Interest Exp. / Inc. (-)	-36	-69	-520	-608	-723	
Inc (-) / Dec in WCap.	-147	-99	-425	-165	-339	
Others	-206	-282	184	193	203	
Taxes Paid	-23	-140	-252	-528	-792	
Operating Cash Flow	482	159	874	1,527	1,915	
Capex	-71	-28	-127	-104	-180	
Free Cash Flow	411	131	747	1,423	1,735	
Inc (-) / Dec in Investments	-136	4,042	0	0	0	
Others	42	-5,116	520	608	723	
Investing Cash Flow	-166	-1,101	393	504	543	
Inc / Dec (-) in Capital	37	2	0	0	0	
Dividend + Tax thereon	0	0	0	0	0	
Inc / Dec (-) in Loans	-211	-331	368	277	322	
Others	-217	0	-356	-318	-470	
Financing Cash Flow	-391	-329	12	-41	-148	
Inc / Dec (-) in Cash	-75	-1,272	1,280	1,990	2,311	
Opening Cash Balance	353	2,267	995	2,274	4,265	
Closing Cash Balance	279	995	2,274	4,265	6,576	

Source: Company, JM Financial

Dupont Analysis		FY23A	FY24A	FY25E	FY26E	FY27E
Net Margin		9.3%	2.9%	17.2%	19.5%	22.4%
Asset Turnover (x)		0.2	0.2	0.3	0.3	0.3
Leverage Factor (x)		1.1	1.1	1.1	1.1	1.1
RoE		1.7%	0.7%	5.4%	6.9%	8.6%

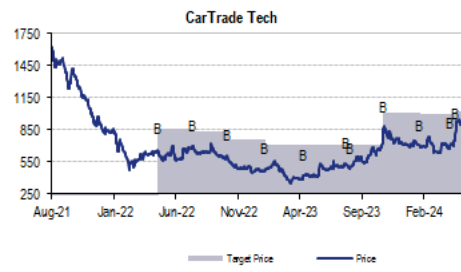
Key Ratios		FY23A	FY24A	FY25E	FY26E	FY27E
BV/Share (INR)		437.6	441.4	470.0	507.7	558.0
ROIC		0.2%	2.5%	4.9%	7.3%	10.3%
ROE		1.7%	0.7%	5.4%	6.9%	8.6%
Net Debt/Equity (x)		-0.5	-0.2	-0.3	-0.3	-0.4
P/E (x)		117.3	280.1	34.7	25.4	18.6
P/B (x)		1.8	1.8	1.7	1.6	1.4
EV/EBITDA (x)		86.4	41.5	23.5	15.1	10.1
EV/Sales (x)		7.8	6.7	4.8	3.8	3.0
Debtor days		52	55	51	46	48
Inventory days		0	0	0	0	0
Creditor days		24	31	27	27	27

Source: Company, JM Financial

History of Recommendation and Target Price

Date	Recommendation	Target Price	% Chg.
5-May-22	Buy	860	
30-Jul-22	Buy	840	-2.3
23-Oct-22	Buy	760	-9.5
25-Jan-23	Buy	710	-6.6
28-Apr-23	Buy	710	0.0
10-Aug-23	Buy	710	0.0
21-Aug-23	Buy	710	0.0
10-Nov-23	Buy	1,010	42.3
8-Feb-24	Buy	1,000	-1.0
24-Apr-24	Buy	1,000	0.0
6-May-24	Buy	1,020	2.0

Recommendation History



APPENDIX I

JM Financial Institutional Securities Limited

Corporate Identity Number: U67100MH2017PLC296081

Member of BSE Ltd. and National Stock Exchange of India Ltd.

SEBI Registration Nos.: Stock Broker - INZ000163434, Research Analyst - INH000000610

Registered Office: 7th Floor, Cnergy, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India.

Board: +91 22 6630 3030 | Fax: +91 22 6630 3488 | Email: jmfinancial.research@jmfl.com | www.jmfl.com

Compliance Officer: Mr. Sahil Salastekar | Tel: +91 22 6224 1073 | Email: sahil.salastekar@jmfl.com

Grievance officer: Mr. Sahil Salastekar | Tel: +91 22 6224 1073 | Email: instcompliance@jmfl.com

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Definition of ratings	
Rating	Meaning
Buy	Total expected returns of more than 10% for stocks with market capitalisation in excess of INR 200 billion and REITs* and more than 15% for all other stocks, over the next twelve months. Total expected return includes dividend yields.
Hold	Price expected to move in the range of 10% downside to 10% upside from the current market price for stocks with market capitalisation in excess of INR 200 billion and REITs* and in the range of 10% downside to 15% upside from the current market price for all other stocks, over the next twelve months.
Sell	Price expected to move downwards by more than 10% from the current market price over the next twelve months.

* REITs refers to Real Estate Investment Trusts.

Research Analyst(s) Certification

The Research Analyst(s), with respect to each issuer and its securities covered by them in this research report, certify that:

All of the views expressed in this research report accurately reflect his or her or their personal views about all of the issuers and their securities; and

No part of his or her or their compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

Important Disclosures

This research report has been prepared by JM Financial Institutional Securities Limited (JM Financial Institutional Securities) to provide information about the company(ies) and sector(s), if any, covered in the report and may be distributed by it and/or its associates solely for the purpose of information of the select recipient of this report. This report and/or any part thereof, may not be duplicated in any form and/or reproduced or redistributed without the prior written consent of JM Financial Institutional Securities. This report has been prepared independent of the companies covered herein.

JM Financial Institutional Securities is registered with the Securities and Exchange Board of India (SEBI) as a Research Analyst and a Stock Broker having trading memberships of the BSE Ltd. (BSE) and National Stock Exchange of India Ltd. (NSE). No material disciplinary action has been taken by SEBI against JM Financial Institutional Securities in the past two financial years which may impact the investment decision making of the investor. Registration granted by SEBI and certification from the National Institute of Securities Market (NISM) in no way guarantee performance of JM Financial Institutional Securities or provide any assurance of returns to investors.

JM Financial Institutional Securities renders stock broking services primarily to institutional investors and provides the research services to its institutional clients/investors. JM Financial Institutional Securities and its associates are part of a multi-service, integrated investment banking, investment management, brokerage and financing group. JM Financial Institutional Securities and/or its associates might have provided or may provide services in respect of managing offerings of securities, corporate finance, investment banking, mergers & acquisitions, broking, financing or any other advisory services to the company(ies) covered herein. JM Financial Institutional Securities and/or its associates might have received during the past twelve months or may receive compensation from the company(ies) mentioned in this report for rendering any of the above services.

JM Financial Institutional Securities and/or its associates, their directors and employees may; (a) from time to time, have a long or short position in, and buy or sell the securities of the company(ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) covered under this report or (c) act as an advisor or lender/borrower to, or may have any financial interest in, such company(ies) or (d) considering the nature of business/activities that JM Financial Institutional Securities is engaged in, it may have potential conflict of interest at the time of publication of this report on the subject company(ies).

Neither JM Financial Institutional Securities nor its associates or the Research Analyst(s) named in this report or his/her relatives individually own one per cent or more securities of the company(ies) covered under this report, at the relevant date as specified in the SEBI (Research Analysts) Regulations, 2014.

The Research Analyst(s) principally responsible for the preparation of this research report and their immediate relatives are prohibited from buying or selling debt or equity securities, including but not limited to any option, right, warrant, future, long or short position issued by company(ies) covered under this report. The Research Analyst(s) principally responsible for the preparation of this research report or their immediate relatives (as defined under SEBI (Research Analysts) Regulations, 2014); (a) do not have any financial interest in the company(ies) covered under this report or (b) did not receive any compensation from the company(ies) covered under this report, or from any third party, in connection with this report or (c) do not have any other material conflict of interest at the time of publication of this report. Research Analyst(s) are not serving as an officer, director or employee of the company(ies) covered under this report.

While reasonable care has been taken in the preparation of this report, it does not purport to be a complete description of the securities, markets or developments referred to herein, and JM Financial Institutional Securities does not warrant its accuracy or completeness. JM Financial Institutional Securities may not be in any way responsible for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. This report is provided for information only and is not an investment advice and must not alone be taken as the basis for an investment decision.

This research report is based on the fundamental research/analysis conducted by the Research Analyst(s) named herein. Accordingly, this report has been prepared by studying/focusing on the fundamentals of the company(ies) covered in this report and other macro-economic factors. JM Financial Institutional Securities may have also issued or may issue, research reports and/or recommendations based on the technical/quantitative analysis of the company(ies) covered in this report by studying and using charts of the stock's price movement, trading volume and/or other volatility parameters. As a result, the views/recommendations expressed in such technical research reports could be inconsistent or even contrary to the views contained in this report.

The investment discussed or views expressed or recommendations/opinions given herein may not be suitable for all investors. The user assumes the entire risk of any use made of this information. The information contained herein may be changed without notice and JM Financial Institutional Securities reserves the right to make modifications and alterations to this statement as they may deem fit from time to time.

This report is neither an offer nor solicitation of an offer to buy and/or sell any securities mentioned herein and/or not an official confirmation of any transaction.

This report is not directed or intended for distribution to, or use by any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject JM Financial Institutional Securities and/or its affiliated company(ies) to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to a certain category of investors. Persons in whose possession this report may come, are required to inform themselves of and to observe such restrictions.

Additional disclosure only for U.S. persons: JM Financial Institutional Securities has entered into an agreement with JM Financial Securities, Inc. ("JM Financial Securities"), a U.S. registered broker-dealer and member of the Financial Industry Regulatory Authority ("FINRA") in order to conduct certain business in the United States in reliance on the exemption from U.S. broker-dealer registration provided by Rule 15a-6, promulgated under the U.S. Securities Exchange Act of 1934 (the "Exchange Act"), as amended, and as interpreted by the staff of the U.S. Securities and Exchange Commission ("SEC") (together "Rule 15a-6").

This research report is distributed in the United States by JM Financial Securities in compliance with Rule 15a-6, and as a "third party research report" for purposes of FINRA Rule 2241. In compliance with Rule 15a-6(a)(3) this research report is distributed only to "major U.S. institutional investors" as defined in Rule 15a-6 and is not intended for use by any person or entity that is not a major U.S. institutional investor. If you have received a copy of this research report and are not a major U.S. institutional investor, you are instructed not to read, rely on, or reproduce the contents hereof, and to destroy this research or return it to JM Financial Institutional Securities or to JM Financial Securities.

This research report is a product of JM Financial Institutional Securities, which is the employer of the research analyst(s) solely responsible for its content. The research analyst(s) preparing this research report is/are resident outside the United States and are not associated persons or employees of any U.S. registered broker-dealer. Therefore, the analyst(s) are not subject to supervision by a U.S. broker-dealer, or otherwise required to satisfy the regulatory licensing requirements of FINRA and may not be subject to the Rule 2241 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

Any U.S. person who is recipient of this report that wishes further information regarding, or to effect any transaction in, any of the securities discussed in this report, must contact, and deal directly through a U.S. registered representative affiliated with a broker-dealer registered with the SEC and a member of FINRA. In the U.S., JM Financial Institutional Securities has an affiliate, JM Financial Securities, Inc. located at 1325 Avenue of the Americas, 28th Floor, Office No. 2821, New York, New York 10019. Telephone +1 (332) 900 4958 which is registered with the SEC and is a member of FINRA and SIPC.

Additional disclosure only for U.K. persons: Neither JM Financial Institutional Securities nor any of its affiliates is authorised in the United Kingdom (U.K.) by the Financial Conduct Authority. As a result, this report is for distribution only to persons who (i) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Financial Promotion Order"), (ii) are persons falling within Article 49(2)(a) to (d) ("high net worth companies, unincorporated associations etc.") of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000) in connection with the matters to which this report relates may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "relevant persons"). This report is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this report relates is available only to relevant persons and will be engaged in only with relevant persons.

Additional disclosure only for Canadian persons: This report is not, and under no circumstances is to be construed as, an advertisement or a public offering of the securities described herein in Canada or any province or territory thereof. Under no circumstances is this report to be construed as an offer to sell securities or as a solicitation of an offer to buy securities in any jurisdiction of Canada. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by a dealer properly registered under applicable securities laws or, alternatively, pursuant to an exemption from the registration requirement in the relevant province or territory of Canada in which such offer or sale is made. This report is not, and under no circumstances is it to be construed as, a prospectus or an offering memorandum. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon these materials, the information contained herein or the merits of the securities described herein and any representation to the contrary is an offence. If you are located in Canada, this report has been made available to you based on your representation that you are an "accredited investor" as such term is defined in National Instrument 45-106 Prospectus Exemptions and a "permitted client" as such term is defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Under no circumstances is the information contained herein to be construed as investment advice in any province or territory of Canada nor should it be construed as being tailored to the needs of the recipient. Canadian recipients are advised that JM Financial Securities, Inc., JM Financial Institutional Securities Limited, their affiliates and authorized agents are not responsible for, nor do they accept, any liability whatsoever for any direct or consequential loss arising from any use of this research report or the information contained herein.