

Jindal Steel

Refer to important disclosures at the end of this report

Positive triggers ahead; Initiate with BUY

CMP	Target Price
Rs 581 as of (February 12, 2023)	Rs 900 12 months
Rating	Upside
BUY	54.8 %

- Jindal Steel & Power (JSPL) has embarked on an expansion program spread over FY22-26 which will not only increase its capacity, from ~9mtpa currently to ~16mtpa, but also improve its cost efficiency (12mtpa pellet plants, slurry pipeline, HSM), at an outlay of ~Rs200bn. Growth capex/ton translates into sub-US\$300 vs replacement cost of ~US\$800/ton, implying attractive incremental RoCE. Also, the capex can be met entirely from internal accruals which points to no increase in leverage due to this.
- Jindal Steel & Power (JSPL) has a well-balanced capacity mix between BF and EAF, making it much less vulnerable to coking-coal price volatility. Once fully ramped up, JSPL's international coking-coal assets will give it a partial, natural hedge. JSPL's access to captive thermal coal grants it a fairly good competitive advantage over both, domestic and international peers. JSPL's product mix is skewed towards construction/infrastructure steel which will help the company to capitalize on the Government-of-India's (GoI) capex thrust.
- JSPL has significantly de-risked its balance sheet (BS) over the last ~4 years. Based on its current & potential EBITDA, there is scope for JSPL to leverage its BS for growth beyond 16mtpa. Acquisitions at expensive valuations, though, would not be prudent.
- Over FY23-26, we also forecast EBITDA CAGR of 25% and believe that JSPL will generate 'Value Add' of Rs420bn (~70% of current market-cap).
- Near-term EBITDA/FCF momentum is positive, as Q4FY23 is expected to be strong.
- We value JSPL using EV/IC multiples that we adjust up or down, based on how much the RoCE is higher or lower than the WACC. We have an EV/IC-based TP of Rs900/share.

Steel-sector fundamentals improving: In the near-to-medium term, the steel sector is likely to emerge from the weak phase in H2CY22 (already underway), as a result of: 1) substantive reversal of zero-Covid policy in China, GoI initiatives to ease pain in the real-estate sector, etc; 2) easing of the energy crisis in Europe that could improve industrial activity, etc. Structurally, the steel sector is set to benefit from the growing focus on de-carbonization which would limit capacity adds in China and in a number of other countries in the developed world.

Too many positives: Post the setbacks in terms of cancellation of coal blocks, and the resultant capacity redundancy and, hence, consequent excessive leverage on the balance sheet (FY14-18), JSPL has embarked on the path of deleveraging (FY19-22, now largely complete), growing capacity and reducing its vulnerability to sectoral challenges (increasing value-added capacity, acquiring captive coal blocks and so on). Despite the ongoing large capex, JSPL has significant scope on the balance sheet to pursue further growth opportunities. Its international coking-coal assets provide it a natural hedge.

We initiate coverage on JSPL with a BUY and 1 yr fwd TP of Rs900. Key downside risks: 1) inherent volatile nature of the sector; 2) sudden large swings in steel prices; 3) unfavorable regulation like the proposed carbon border adjustment tax in Europe, etc. 4) regulatory delays.

Financial Snapshot (Consolidated)

(Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Revenue	345,405	510,856	543,400	591,250	747,250
EBITDA	130,913	155,134	100,274	106,232	156,435
EBITDA Margin (%)	37.9	30.4	18.5	18.0	20.9
APAT	38,375	61,593	45,940	58,461	95,413
EPS (Rs)	37.6	60.4	45.0	57.3	93.5
EPS (% chg)	1,744,209.1	60.5	(25.4)	27.3	63.2
ROE (%)	12.0	18.3	12.4	14.2	19.5
P/E (x)	15.5	9.6	12.9	10.1	6.2
EV/EBITDA (x)	6.2	4.4	6.5	5.8	3.5
P/BV (x)	1.9	1.7	1.6	1.3	1.1

Source: Company, Emkay Research

Change in Estimates

EPS Chg FY23E/FY24E (%)	-/
Target Price change (%)	NA
Target Period (Months)	12
Previous Reco	

Emkay vs Consensus

	EPS Estimates	
	FY23E	FY24E
Emkay	45.0	57.3
Consensus	47.9	59.3
Mean Consensus TP (12M)	Rs 639	

Stock Details

Bloomberg Code	JSP IN
Face Value (Rs)	1
Shares outstanding (mn)	1,020
52 Week H/L	623 / 304
M Cap (Rs bn/USD bn)	593 / 7.19
Daily Avg Volume (nos.)	3,622,719
Daily Avg Turnover (USD mn)	24.5

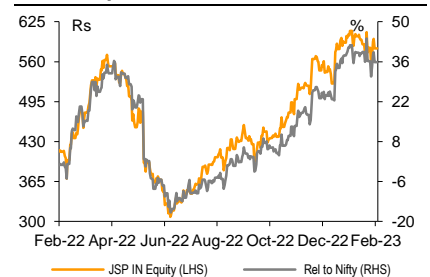
Shareholding Pattern Dec '22

Promoters	61.2%
FIIIs	13.1%
DIIIs	14.2%
Public and Others	11.5%

Price Performance

(%)	1M	3M	6M	12M
Absolute	(3)	22	47	32
Rel. to Nifty	(3)	24	44	30

Relative price chart



Source: Bloomberg

This report is solely produced by Emkay Global. The following person(s) are responsible for the production of the recommendation:

Prashanth Kota

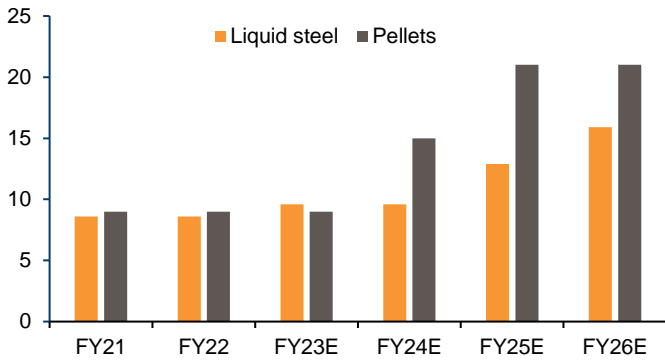
prashanth.kota@emkayglobal.com
+91 22 6624 2474

Inaara Bardai

inaara.bardai@emkayglobal.com
+91 22 6612 1340

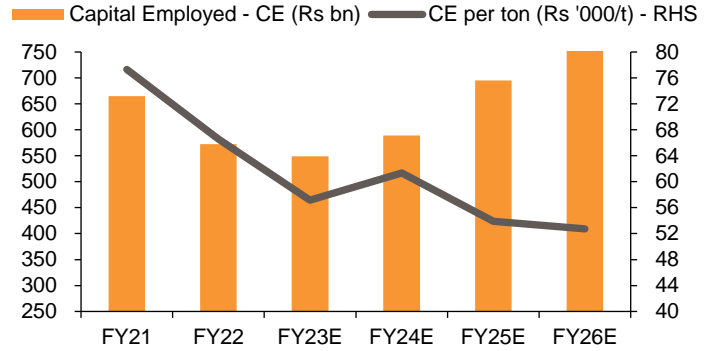
Story in Charts

Exhibit 1: JSPL's capacity roadmap (mt)



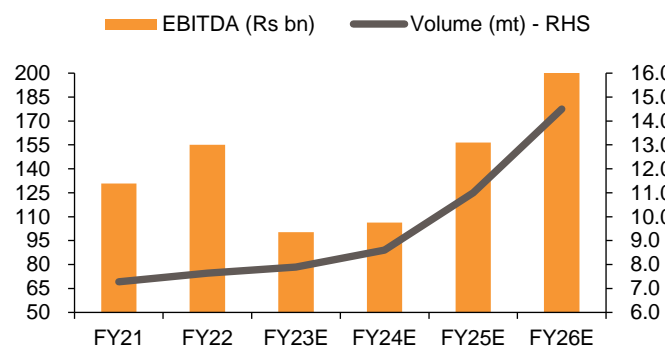
Source: Company, Emkay Research

Exhibit 2: Incremental capacity coming at low capital cost



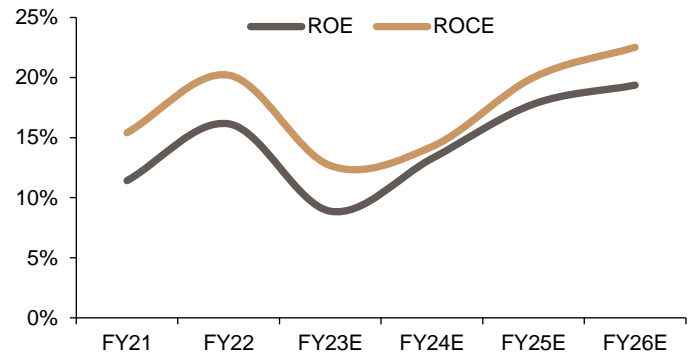
Source: Company, Emkay Research

Exhibit 3: Higher volumes to drive up EBITDA



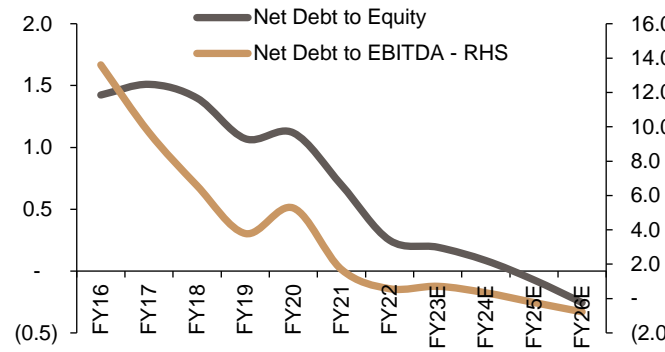
Source: Company, Emkay Research;

Exhibit 4: Increasing return ratios



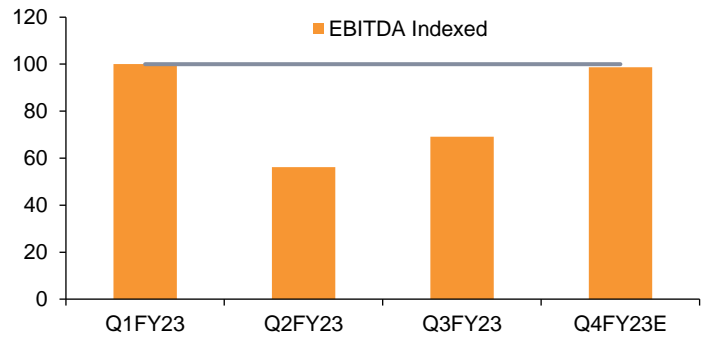
Source: Company, Emkay Research

Exhibit 5: Scope to add leverage for driving capacity higher and faster



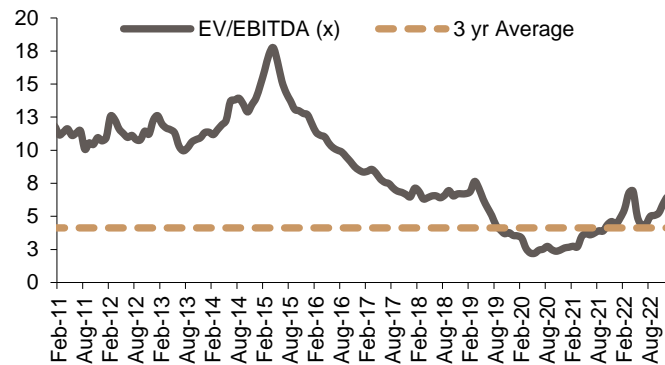
Source: Company, Emkay Research

Exhibit 6: Near-term EBITDA momentum is positive



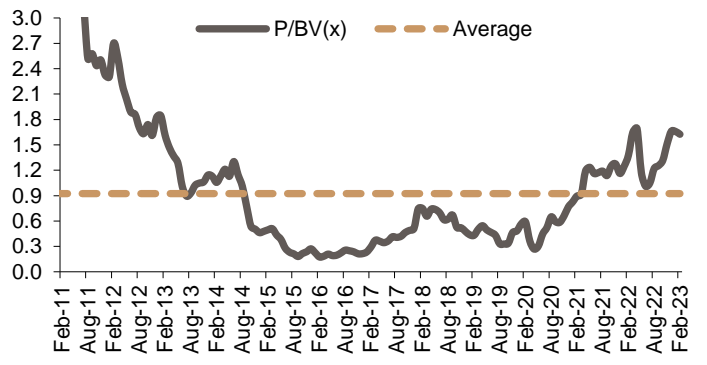
Source: Company, Emkay Research

Exhibit 7: Rerated recently; now in line with sector average



Source: Company, Emkay Research

Exhibit 8: Rerated recently; now in line with sector average



Source: Company, Emkay Research

This report is intended for team.emkay@whitemarquesolutions.com use and downloaded at 02/14/2023 02:08 PM

Emkay Research is also available on www.emkayglobal.com and Bloomberg EMKAY<GO>. Please refer to the last page of the report on Restrictions on Distribution. In Singapore, this research report or research analyses may only be distributed to Institutional Investors, Expert Investors or Accredited Investors as defined in the Securities and Futures Act, Chapter 289 of Singapore.

Detailed Emkay forecasts

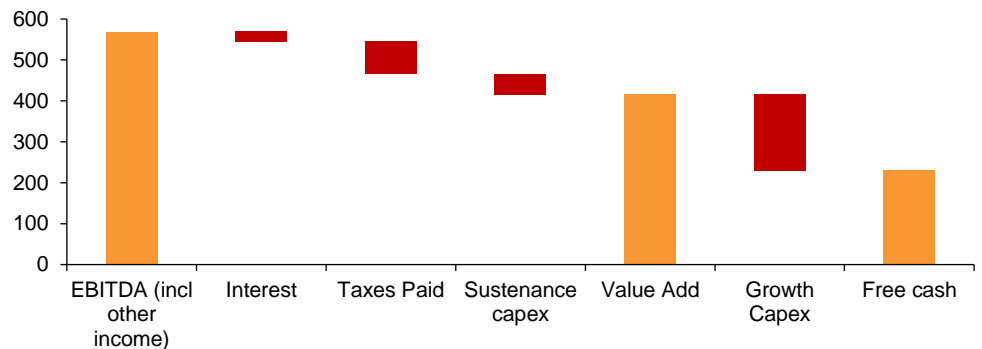
We use a three-scenario-based approach to better capture the broad range of potential outcomes. Our forecasts are built on normal-cycle scenarios (marginally above spot spreads). Our up-cycle scenario assumes higher steel volumes as a result of faster execution and prices & spreads than in the normal-cycle scenario (most similar to what we saw in FY22). Our downside-scenario assumes slower capacity ramp-up and higher steel prices & spreads, than in our normal-scenario (most similar to what we saw in FY20). We arrive at up-/normal-/down-cycle valuations of Rs900/1,260/450 per share.

Exhibit 9: Our detailed assumptions

Rs mn	FY21	FY22	FY23E	FY24E	FY25E	FY26E
Volume (mt)	7.28	7.64	7.90	8.60	11.00	14.50
Cons Revenue (ex-power)	345,405	510,856	543,400	591,250	747,250	974,750
EBITDA/t (Rs)	17,151	15,217	12,433	11,816	13,802	13,775
Cons EBITDA	130,913	155,134	100,274	106,232	156,435	204,349
Net debt	221,460	88,760	56,241	20,974	(49,828)	(171,380)
Value-Add workings						
EBITDA	130,913	155,134	100,274	106,232	156,435	204,349
Other Income	(4,630)	(7,165)	30,500	500	500	500
Tax Paid	515	(19,604)	(19,019)	(12,036)	(20,042)	(27,278)
Interest Exp	(18,287)	(17,948)	(9,539)	(5,613)	(4,458)	(4,458)
Maintenance Capex	(7,500)	(7,500)	(7,500)	(7,500)	(7,500)	(7,500)
Value-Add	101,012	102,918	94,716	81,584	124,936	165,613
Growth Capex	(133)	(5,307)	(47,000)	(43,000)	(41,000)	(25,000)
FCF post capex	100,879	97,610	47,716	38,584	83,936	140,613

Source: Company, Emkay Research

Exhibit 10: JSPL's FY23-26E value-add bridge (Rs bn)



Source: Company, Emkay Research

Valuation

We value JSPL using EV/IC multiples, which we adjust upwards or downwards based on how much the RoCE is higher or lower than the WACC. However, we also employ an element of subjectivity, based on the cycle, to tweak such multiples. We have an EV/IC-based TP of Rs900/share, and a BUY rating on the stock. We also cross-check the valuation, based on implied EV/EBITDA multiples.

Exhibit 11: JSPL's EV/IC-based TP derivation

(Rs mn)	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E	FY26E
RoCE	3.2	4.7	4.5	15.4	20.2	12.7	14.2	20.0	22.5
WACC	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3
RoCE less WACC	(9.1)	(7.5)	(7.7)	3.1	7.9	0.4	2.0	7.7	10.2
EV	587,742	530,182	423,450	436,068	498,836	669,314	634,047	563,245	441,693
Capital Employed	798,428	725,615	777,637	677,222	483,856	392,431	436,147	546,346	694,064
EV/IC	0.74	0.73	0.54	0.64	1.03	1.71	1.45	1.03	0.64
Target EV/IC			0.8	1.0	1.3	1.6	1.3	1.5	1.6
Target EV			622,109	677,222	604,820	608,269	558,268	843,831	1,138,266
Gross Debt			368,628	293,095	98,767	68,767	13,767	13,767	13,767
Cash & Equivalents			9,438	71,635	40,006	12,526	22,793	93,595	215,146
Net Debt			359,190	221,460	58,760	56,241	(9,026)	(79,828)	(201,380)
LT Provision			3,942	4,055	5,107	5,107	5,107	5,107	5,107
EQUITY Value			258,978	451,707	540,952	546,921	562,187	918,552	1,334,538
EQUITY Value per share						536	551	900	1,308
1-year forward TP (Rs/share)								900	

Implied Multiples	FY20	FY21	FY22	FY23E	FY24E	FY25E	FY26E
EV/EBITDA (x)	9.1	5.2	4.3	6.9	5.9	5.9	5.9
P/E (x)	NM	12.4	9.4	16.1	9.6	9.6	10.4
P/BV (x)	0.8	1.4	1.5	1.4	1.3	1.7	2.0

Source: Company, Emkay Research

Key Financials (Consolidated)**Income Statement**

Y/E Mar (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Revenue	345,405	510,856	543,400	591,250	747,250
Expenditure	214,493	355,721	443,126	485,018	590,815
EBITDA	130,913	155,134	100,274	106,232	156,435
Depreciation	24,141	20,968	23,644	23,942	26,031
EBIT	106,771	134,167	76,631	82,290	130,405
Other Income	5,320	504	500	500	500
Interest expenses	27,533	18,877	9,739	5,813	4,658
PBT	84,558	115,793	67,392	76,977	126,247
Tax	18,108	29,245	29,260	18,516	30,834
Extraordinary Items	(2,039)	(4,062)	(12,000)	0	0
Minority Int./Income from Assoc.	(15,406)	(4,701)	7,809	0	0
Reported Net Income	36,336	57,531	33,940	58,461	95,413
Adjusted PAT	38,375	61,593	45,940	58,461	95,413

Balance Sheet

Y/E Mar (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Equity share capital	1,020	1,011	1,011	1,011	1,011
Reserves & surplus	317,127	355,236	381,367	439,829	535,242
Net worth	318,147	356,247	382,378	440,839	536,252
Minority Interest	(8,777)	14,705	14,705	14,705	14,705
Loan Funds	293,095	128,767	68,767	43,767	43,767
Net deferred tax liability	62,394	72,762	83,003	89,484	100,276
Total Liabilities	664,858	572,481	548,853	588,795	695,000
Net block	543,497	454,878	438,734	422,292	493,761
Investment	12,122	4,699	4,699	4,699	4,699
Current Assets	205,670	281,474	162,389	180,073	281,647
Cash & bank balance	61,522	36,685	9,205	19,471	90,274
Other Current Assets	41,976	139,375	27,232	27,232	27,232
Current liabilities & Provision	113,546	193,955	129,353	133,653	151,492
Net current assets	92,124	87,520	33,036	46,420	130,156
Misc. exp	0	0	0	0	0
Total Assets	664,858	572,481	548,853	588,795	695,000

Cash Flow

Y/E Mar (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
PBT (Ex-Other income) (NI+Dep)	79,238	115,290	66,892	76,477	125,747
Other Non-Cash items	0	0	0	0	0
Chg in working cap	(22,625)	(10,917)	37,245	3,363	(2,142)
Operating Cashflow	119,609	160,478	56,108	91,579	123,960
Capital expenditure	(18,892)	(24,944)	(13,849)	(50,500)	(48,500)
Free Cash Flow	100,717	135,534	42,258	41,079	75,460
Investments	(10,316)	7,423	0	0	0
Other Investing Cash Flow	5,046	(6,296)	(500)	(500)	(500)
Investing Cashflow	(18,842)	(23,313)	(13,849)	(50,500)	(48,500)
Equity Capital Raised	0	(9)	0	0	0
Loans Taken / (Repaid)	(75,533)	(164,328)	(60,000)	(25,000)	0
Dividend paid (incl tax)	(18)	(984)	0	0	0
Other Financing Cash Flow	56,965	33,003	0	0	0
Financing Cashflow	(46,120)	(151,196)	(69,739)	(30,813)	(4,658)
Net chg in cash	54,647	(14,031)	(27,480)	10,267	70,802
Opening cash position	36,685	9,205	19,471	90,274	211,825
Closing cash position	91,332	(4,826)	(8,009)	100,540	282,627

Source: Company, Emkay Research

This report is intended for team.emkay@whitemarquesolutions.com use and downloaded at 02/14/2023 02:08 PM

Emkay Research is also available on www.emkayglobal.com and Bloomberg EMKAY<GO>. Please refer to the last page of the report on Restrictions on Distribution. In Singapore, this research report or research analyses may only be distributed to Institutional Investors, Expert Investors or Accredited Investors as defined in the Securities and Futures Act, Chapter 289 of Singapore.

Key Ratios

Profitability (%)	FY21	FY22	FY23E	FY24E	FY25E
EBITDA Margin	37.9	30.4	18.5	18.0	20.9
EBIT Margin	30.9	26.3	14.1	13.9	17.5
Effective Tax Rate	21.4	25.3	43.4	24.1	24.4
Net Margin	19.2	16.9	7.0	9.9	12.8
ROCE	16.0	21.8	13.8	14.6	20.4
ROE	12.0	18.3	12.4	14.2	19.5
RoIC	13.1	18.6	9.0	13.7	20.1

Per Share Data (Rs)	FY21	FY22	FY23E	FY24E	FY25E
EPS	37.6	60.4	45.0	57.3	93.5
CEPS	61.3	80.9	68.2	80.8	119.1
BVPS	311.9	349.2	374.8	432.2	525.7
DPS	0.0	1.0	0.0	0.0	0.0

Valuations (x)	FY21	FY22	FY23E	FY24E	FY25E
PER	15.5	9.6	12.9	10.1	6.2
P/CEPS	9.5	7.2	8.5	7.2	4.9
P/BV	1.9	1.7	1.6	1.3	1.1
EV / Sales	2.4	1.3	1.2	1.0	0.7
EV / EBITDA	6.2	4.4	6.5	5.8	3.5
Dividend Yield (%)	0.0	0.2	0.0	0.0	0.0

Gearing Ratio (x)	FY21	FY22	FY23E	FY24E	FY25E
Net Debt/ Equity	0.7	0.2	0.1	0.0	(0.1)
Net Debt/EBIDTA	1.7	0.6	0.6	0.2	(0.3)
Working Cap Cycle (days)	32.3	36.3	16.0	16.6	19.5

Growth (%)	FY21	FY22	FY23E	FY24E	FY25E
Revenue	13.4	47.9	6.4	8.8	26.4
EBITDA	92.1	18.5	(35.4)	5.9	47.3
EBIT	215.4	25.7	(42.9)	7.4	58.5
PAT	0.0	58.3	(41.0)	72.2	63.2

Quarterly (Rs mn)	Q3FY22	Q4FY22	Q1FY23	Q2FY23	Q3FY23
Revenue	125,249	143,395	130,454	135,214	124,524
EBITDA	33,101	30,702	34,387	19,314	23,775
EBITDA Margin (%)	26.4	21.4	26.4	14.3	19.1
PAT	16,166	15,109	12,121	1,997	5,187
EPS (Rs)	1.3	1.2	1.0	0.2	0.4

Source: Company, Emkay Research

Shareholding Pattern (%)	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22
Promoters	60.4	60.5	60.4	61.2	61.2
FIs	8.9	9.7	10.7	11.0	13.1
DIs	16.7	17.3	15.8	14.9	14.2
Public and Others	13.9	12.5	13.2	12.9	11.5

Source: Capitaline

Emkay Rating Distribution

Ratings	Expected Return within the next 12-18 months.
BUY	Over 15%
HOLD	Between -5% to 15%
SELL	Below -5%

Completed Date: 13 Feb 2023 12:16:45 (SGT)

Dissemination Date: 13 Feb 2023 12:17:45 (SGT)

Sources for all charts and tables are Emkay Research unless otherwise specified.

GENERAL DISCLOSURE/DISCLAIMER BY EMKAY GLOBAL FINANCIAL SERVICES LIMITED (EGFSL):

Emkay Global Financial Services Limited (CIN-L67120MH1995PLC084899) and its affiliates are a full-service, brokerage, investment banking, investment management and financing group. Emkay Global Financial Services Limited (EGFSL) along with its affiliates are participants in virtually all securities trading markets in India. EGFSL was established in 1995 and is one of India's leading brokerage and distribution house. EGFSL is a corporate trading member of Bombay Stock Exchange Limited (BSE), National Stock Exchange of India Limited (NSE), MCX Stock Exchange Limited (MCX-SX). EGFSL along with its subsidiaries offers the most comprehensive avenues for investments and is engaged in the businesses including stock broking (Institutional and retail), merchant banking, commodity broking, depository participant, portfolio management, insurance broking and services rendered in connection with distribution of primary market issues and financial products like mutual funds, fixed deposits. Details of associates are available on our website i.e. www.emkayglobal.com

EGFSL is registered as Research Analyst with SEBI bearing registration Number INH000000354 as per SEBI (Research Analysts) Regulations, 2014. EGFSL hereby declares that it has not defaulted with any stock exchange nor its activities were suspended by any stock exchange with whom it is registered in last five years, except that NSE had disabled EGFSL from trading on October 05, October 08 and October 09, 2012 for a manifest error resulting into a bonafide erroneous trade on October 05, 2012. However, SEBI and Stock Exchanges have conducted the routine inspection and based on their observations have issued advice letters or levied minor penalty on EGFSL for certain operational deviations in ordinary/routine course of business. EGFSL has not been debarred from doing business by any Stock Exchange / SEBI or any other authorities; nor has its certificate of registration been cancelled by SEBI at any point of time.

EGFSL offers research services to clients as well as prospects. The analyst for this report certifies that all of the views expressed in this report accurately reflect his or her personal views about the subject company or companies and its or their securities, and no part of his or her compensation was, is or will be, directly or indirectly related to specific recommendations or views expressed in this report.

Other disclosures by Emkay Global Financial Services Limited (Research Entity) and its Research Analyst under SEBI (Research Analyst) Regulations, 2014 with reference to the subject company(s) covered in this report

EGFSL and/or its affiliates may seek investment banking or other business from the company or companies that are the subject of this material. Emkay may have issued or may issue other reports that are inconsistent with and reach different conclusion from the information, recommendations or information presented in this report or are contrary to those contained in this report. Emkay Investors may visit www.emkayglobal.com to view all Research Reports. The views and opinions expressed in this document may or may not match or may be contrary with the views, estimates, rating, and target price of the research published by any other analyst or by associate entities of Emkay; our proprietary trading, investment businesses or other associate entities may make investment decisions that are inconsistent with the recommendations expressed herein. In reviewing these materials, you should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest including but not limited to those stated herein. Additionally, other important information regarding our relationships with the company or companies that are the subject of this material is provided herein. This report is not directed to, 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 or regulation or which would subject EGFSL or its group companies to any registration or licensing requirement within such jurisdiction. Specifically, this document does not constitute an offer to or solicitation to any U.S. person for the purchase or sale of any financial instrument or as an official confirmation of any transaction to any U.S. person. Unless otherwise stated, this message should not be construed as official confirmation of any transaction. No part of this document may be distributed in Canada or used by private customers in United Kingdom. All material presented in this report, unless specifically indicated otherwise, is under copyright to Emkay. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of EGFSL. All trademarks, service marks and logos used in this report are trademarks or registered trademarks of EGFSL or its Group Companies. The information contained herein is not intended for publication or distribution or circulation in any manner whatsoever and any unauthorized reading, dissemination, distribution or copying of this communication is prohibited unless otherwise expressly authorized. Please ensure that you have read "Risk Disclosure Document for Capital Market and Derivatives Segments" as prescribed by Securities and Exchange Board of India before investing in Indian Securities Market. In so far as this report includes current or historic information, it is believed to be reliable, although its accuracy and completeness cannot be guaranteed.

- This publication has not been reviewed or authorized by any regulatory authority. There is no planned schedule or frequency for updating research publication relating to any issuer.
- Please contact the primary analyst for valuation methodologies and assumptions associated with the covered companies or price targets

Disclaimer for U.S. persons only: This research report is a product of Emkay Global Financial Services Limited (Emkay), which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of Financial Institutions Regulatory Authority (FINRA) or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account. This report is intended for distribution to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor. In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors.

ANALYST CERTIFICATION BY EMKAY GLOBAL FINANCIAL SERVICES LIMITED (EGFSL)

The research analyst(s) primarily responsible for the content of this research report, in part or in whole, certifies that the views about the companies and their securities expressed in this report accurately reflect his/her personal views. The analyst(s) also certifies that no part of his/her compensation was, is, or will be, directly or indirectly, related to specific recommendations or views expressed in the report. The research analyst (s) primarily responsible of the content of this research report, in part or in whole, certifies that he or his associate¹ does not serve as an officer, director or employee of the issuer or the new listing applicant (which includes in the case of a real estate investment trust, an officer of the management company of the real estate investment trust; and in the case of any other entity, an officer or its equivalent counterparty of the entity who is responsible for the management of the issuer or the new listing applicant). The research analyst(s) primarily responsible for the content of this research report or his associate does not have financial interests² in relation to an issuer or a new listing applicant that the analyst reviews. EGFSL has procedures in place to eliminate, avoid and manage any potential conflicts of interests that may arise in connection with the production of research reports. The research analyst(s) responsible for this report operates as part of a separate and independent team to the investment banking function of the EGFSL and procedures are in place to ensure that confidential information held by either the research or investment banking function is handled appropriately. There is no direct link of EGFSL compensation to any specific investment banking function of the EGFSL.

¹ An associate is defined as (i) the spouse, or any minor child (natural or adopted) or minor step-child, of the analyst; (ii) the trustee of a trust of which the analyst, his spouse, minor child (natural or adopted) or minor step-child, is a beneficiary or discretionary object; or (iii) another person accustomed or obliged to act in accordance with the directions or instructions of the analyst.

² Financial interest is defined as interest that are commonly known financial interest, such as investment in the securities in respect of an issuer or a new listing applicant, or financial accommodation arrangement between the issuer or the new listing applicant and the firm or analysis. This term does not include commercial lending conducted at the arm's length, or investments in any collective investment scheme other than an issuer or new listing applicant notwithstanding the fact that the scheme has investments in securities in respect of an issuer or a new listing applicant.

COMPANY-SPECIFIC / REGULATORY DISCLOSURES BY EMKAY GLOBAL FINANCIAL SERVICES LIMITED (EGFSL):

Disclosures by Emkay Global Financial Services Limited (Research Entity) and its Research Analyst under SEBI (Research Analyst) Regulations, 2014 with reference to the subject company(s) covered in this report:-

1. EGFSL, its subsidiaries and/or other affiliates do not have a proprietary position in the securities recommended in this report as of February 12, 2023
2. EGFSL, and/or Research Analyst does not market make in equity securities of the issuer(s) or company(ies) mentioned in this Research Report
Disclosure of previous investment recommendation produced:
3. EGFSL may have published other investment recommendations in respect of the same securities / instruments recommended in this research report during the preceding 12 months. Please contact the primary analyst listed in the first page of this report to view previous investment recommendations published by EGFSL in the preceding 12 months.
4. EGFSL, its subsidiaries and/or other affiliates and Research Analyst or his/her relative's does not have any material conflict of interest in the securities recommended in this report as of February 12, 2023.
5. EGFSL, its subsidiaries and/or other affiliates and Research Analyst or his/her relative's does not have actual/beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the February 12, 2023
6. EGFSL, its subsidiaries and/or other affiliates and Research Analyst have not received any compensation in whatever form including compensation for investment banking or merchant banking or brokerage services or for products or services other than investment services or merchant banking or brokerage services from securities recommended in this report (subject company) in the past 12 months.
7. EGFSL, its subsidiaries and/or other affiliates and/or and Research Analyst have not received any compensation or other benefits from securities recommended in this report (subject company) or third party in connection with the research report.
8. Securities recommended in this report (Subject Company) has not been client of EGFSL, its subsidiaries and/or other affiliates and/or and Research Analyst during twelve months preceding the February 12, 2023

RESTRICTIONS ON DISTRIBUTION

General	This report is not directed to, 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 or regulation.
Australia	This report is not for distribution into Australia.
Hong Kong	This report is not for distribution into Hong Kong.
Indonesia	This report is being distributed in Indonesia by PT DBS Vickers Sekuritas Indonesia.
Malaysia	This report is not for distribution into Malaysia.
Singapore	This report is distributed in Singapore by DBS Bank Ltd (Company Regn. No. 16800306E) or DBSVS (Company Regn. No. 1860024G) both of which are Exempt Financial Advisers as defined in the Financial Advisers Act and regulated by the Monetary Authority of Singapore. DBS Bank Ltd and/or DBSVS, may distribute reports produced by its respective foreign entities, affiliates or other foreign research houses pursuant to an agreement under Regulation 32C of the financial Advisers Regulations. Singapore recipients should contact DBS Bank Ltd at 6327 2288 for matters arising from, or in connection with the report.
Thailand	This report is being distributed in Thailand by DBS Vickers Securities (Thailand) Co Ltd.
United Kingdom	This report is disseminated in the United Kingdom by DBS Vickers Securities (UK) Ltd, ("DBSVUK"). DBSVUK is authorised and regulated by the Financial Conduct Authority in the United Kingdom. In respect of the United Kingdom, this report is solely intended for the clients of DBSVUK, its respective connected and associated corporations and affiliates only and no part of this document may be (i) copied, photocopied or duplicated in any form or by any means or (ii) redistributed without the prior written consent of DBSVUK. This communication is directed at persons having professional experience in matters relating to investments. Any investment activity following from this communication will only be engaged in with such persons. Persons who do not have professional experience in matters relating to investments should not rely on this communication.
Dubai International Financial Centre	This research report is being distributed by DBS Bank Ltd., (DIFC Branch) having its office at units 608-610, 6 th Floor, Gate Precinct Building 5, PO Box 506538, Dubai International Financial Centre (DIFC), Dubai, United Arab Emirates. DBS Bank Ltd., (DIFC Branch) is regulated by The Dubai Financial Services Authority. This research report is intended only for professional clients (as defined in the DFSA rulebook) and no other person may act upon it.
United Arab Emirates	This report is provided by DBS Bank Ltd (Company Regn. No. 196800306E) which is an Exempt Financial Adviser as defined in the Financial Advisers Act and regulated by the Monetary Authority of Singapore. This report is for information purposes only and should not be relied upon or acted on by the recipient or considered as a solicitation or inducement to buy or sell any financial product. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situation, or needs of individual clients. You should contact your relationship manager or investment adviser if you need advice on the merits of buying, selling or holding a particular investment. You should note that the information in this report may be out of date and it is not represented or warranted to be accurate, timely or complete. This report or any portion thereof may not be reprinted, sold or redistributed without our written consent.
United States	DBSVUSA did not participate in its preparation. The research analyst(s) named on this report are not registered as research analysts with FINRA and are not associated persons of DBSVUSA. The research analyst(s) are not subject to FINRA Rule 2241 restrictions on analyst compensation, communications with a subject company, public appearances and trading securities held by a research analyst. This report is being distributed in the United States by DBSVUSA, which accepts responsibility for its contents. This report may only be distributed to Major U.S. Institutional Investors (as defined in SEC Rule 15a-6) and to such other institutional investors and qualified persons as DBSVUSA may authorize. Any U.S. person receiving this report who wishes to effect transactions in any securities referred to herein should contact DBSVUSA directly and not its affiliate.
Other jurisdictions	In any other jurisdictions, except if otherwise restricted by laws or regulations, this report is intended only for qualified, professional, institutional or sophisticated investors as defined in the laws and regulations of such jurisdictions.

Emkay Global Financial Services Ltd.

CIN - L67120MH1995PLC084899

7th Floor, The Ruby, Senapati Bapat Marg, Dadar - West, Mumbai - 400028. India

Tel: +91 22 66121212 Fax: +91 22 66121299 Web: www.emkayglobal.com