

# Balkrishna Tyres

BSE SENSEX  
65,280

S&P CNX  
19,332

**CMP: INR2,382**
**TP: INR2,240 (-6%)**
**Neutral**

Motilal Oswal values your support in the Asiamoney Brokers Poll 2023 for India Research, Sales, Corporate Access and Trading team. We [request your ballot](#).



## Stock Info

Bloomberg	BIL IN
Equity Shares (m)	193
M.Cap.(INRb)/(USDb)	460.5 / 5.6
52-Week Range (INR)	2525 / 1801
1, 6, 12 Rel. Per (%)	0/-1/-15
12M Avg Val (INR M)	743
Free float (%)	41.7

## Financials Snapshot (INR b)

Y/E March	FY23	FY24E	FY25E
Sales	100.2	102.9	114.0
EBITDA	19.7	25.9	30.0
Adj. PAT	10.1	15.8	18.8
EPS (INR)	52.1	81.6	97.1
EPS Growth (%)	-29.3	56.5	19.0
BV/Share (Rs)	390.9	442.6	504.7

## Ratios

RoE (%)	13.9	19.6	20.5
RoCE (%)	10.9	13.8	15.0
Payout (%)	30.7	36.7	36.0

## Valuations

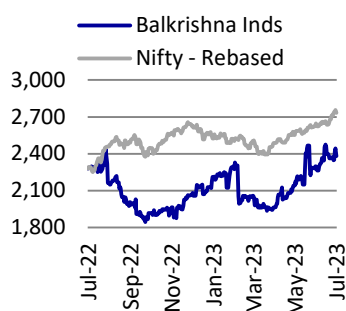
P/E (x)	45.7	29.2	24.5
P/BV (x)	6.1	5.4	4.7
Div. yield (%)	0.7	1.3	1.5
FCF yield (%)	-0.7	3.1	2.8

## Shareholding pattern (%)

As On	Mar-23	Dec-22	Mar-22
Promoter	58.3	58.3	58.3
DII	20.3	20.2	11.8
FII	12.4	12.5	14.1
Others	9.0	9.0	15.9

FII Includes depository receipts

## Stock Performance (1-year)



## Targets 10% market share in 3-4 years

### Demand recovery in 2HFY24; EBITDA margin target of 26-28%

We visited Balkrishna Industries's (BIL) Bhuj plant, which is the largest single location off-highway tyre plant in the world. Built on over 450 acres of land, the plant has 200k ton capacity (of BIL's total 360k ton), along with 200k-ton carbon black capacity and captive power generation. It has scope to further expand the capacity by another 100k-150k ton and to be the key driver in helping BIL gain 10% global market share in the next 3-4 years. While near-term demand challenges persist, the management expects recovery in 2HFY24. It has maintained the long-term EBITDA margin target of 26-28%. Here are the key takeaways from the plant visit and the management meet:

- **Outlook:** The end markets remain challenging, and there are liquidity-related issues. However, retail demand is holding up so far. Inventory has reduced to 70 days and may decline further (normal level of 45-60 days). While 1HFY24 would have base effect, the management is hopeful of recovery in 2HFY24.
- **Vision of 10% market share globally in 3-4 years:** BIL aims to gain a 10% share of the global off-highway tyre industry in the next 3-4 years (vs. 5%-6% currently) by expanding its geographical footprint and product range. This aspiration is based on expectations of 3-5% market growth for the underlying market. It sees good scope to increase market share in the OTR segment (non-agri) and in markets like the US, Eastern EU, etc. BIL is also targeting new products like rubber tracks (under validation) used in farm equipment. It will continue to invest in building brand across markets through sponsorship for sports.
- **OTR – targets 50% revenue:** For BIL, the agri tyre business is much bigger than OTR as it started with the agri segment. However, the OTR market is bigger than Agri in terms of volume and value. BIL expects to increase OTR's revenue share to 50% (from 34% in FY23). The OTR market is broad-based across the US, East EU, LatAm, Africa, Asia and Australia.
- **Scope to add 100k-150k ton capacity at Bhuj:** BIL's Bhuj plant has scope to add 100k-150k ton capacity based on the existing land as well as some addition. It also has some upstream equipment available. The next 100-150k ton capacity expansion would be only through the brownfield route. BIL is waiting for markets to recover before embarking on the next phase of capacity expansion. It takes 12-15 months to construct a brownfield plant. It is not looking to put any plants in the off-shore location and plans to serve customer there through distributors.
- **EBITDA margin target of 26-28% in the long term:** The management expects long-term sustainable EBITDA margins at 26-28% (vs. 19.6% in FY23). It expects the OTR segment's margin to be higher than the agri segment's margin by 1-2pp, though it will have to invest in the ramp-up. Also, the ramp-up in OEMs is not expected to be dilutive as margins are similar. The management expects margins to recover in 2HFY24 and realizations to stabilize at ~INR300/Kg vs. INR334/kg in FY23), as it would pass on some of the commodity cost reduction.

Jinesh Gandhi – Research Analyst (jinesh@MotilalOswal.com)

Research Analyst: Amber Shukla (Amber.Shukla@motilaloswal.com) | Aniket Desai (Aniket.Desai@MotilalOswal.com)

Investors are advised to refer through important disclosures made at the last page of the Research Report.

Motilal Oswal research is available on [www.motilaloswal.com/Institutional-Equities](http://www.motilaloswal.com/Institutional-Equities), Bloomberg, Thomson Reuters, Factset and S&P Capital.

**■ Interesting facts about BIL's Bhuj plant:**

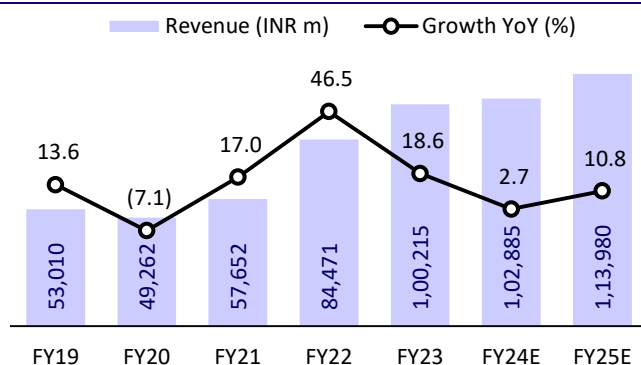
- Bhuj is the earthquake-prone region, and hence BIL has built entire infrastructure in a way that it can withstand an earthquake of a magnitude of 9 on Richter scale (2001 earthquake was 7.6 on scale). It can also withstand a cyclone of up to 140-150km/hr wind speed.
- About 35% of land at the Bhuj plant is dedicated to a green belt. It has planted over 500k trees in the last 12-13 years at Bhuj.
- While tyre manufacturing and carbon black manufacturing are both polluting by nature, BIL's Bhuj plant emits minimal pollution. It is the only company in that area to provide a live feed of pollution parameters to the government. AQI at Bhuj is at 25-30, which is much better than most cities in the country.
- The plant is just 75-80km away or ~2 hours from the Mundra Port, giving easy access for imports of raw materials and exports of tyres.

**Valuation and view**

We expect near-term headwinds likely to continue, given a delayed recovery in EU and likely channel de-stocking in 1QFY24. This should delay EBITDA margin recovery in the near term. However, softening RM costs and freight expenses, along with operating leverage, should drive margin recovery of ~670bp to 26.3% by FY25E. Current valuations fairly reflect its industry-leading margin, FCF and capital efficiencies. The stock currently trades at a P/E multiple of 29.2x/24.5x FY24E/FY25E EPS. Maintain Neutral with a TP of INR2,240 (22x Jun'25E consol. EPS).

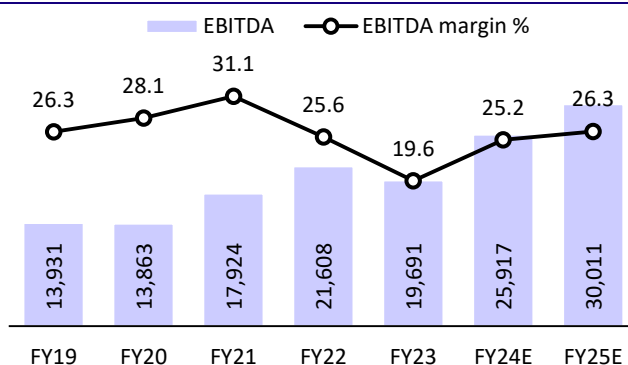
## Story in charts

**Exhibit 1: Revenue to clock ~7% CAGR over FY23-25E**



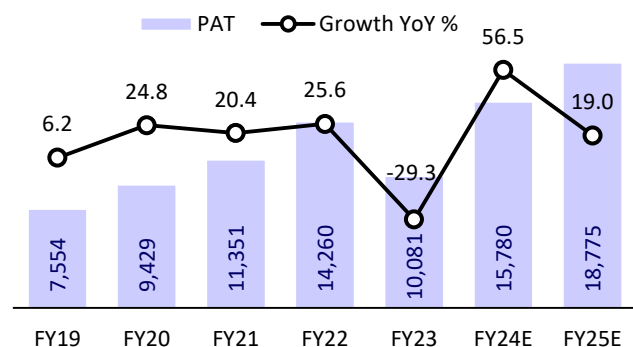
Source: Company, MOFSL

**Exhibit 2: EBITDA margin to improve over FY23-25E**



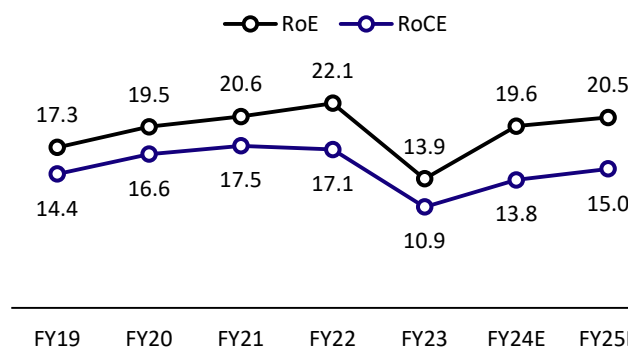
Source: Company, MOFSL

**Exhibit 3: PAT to post ~36.5% CAGR over FY23-25E**



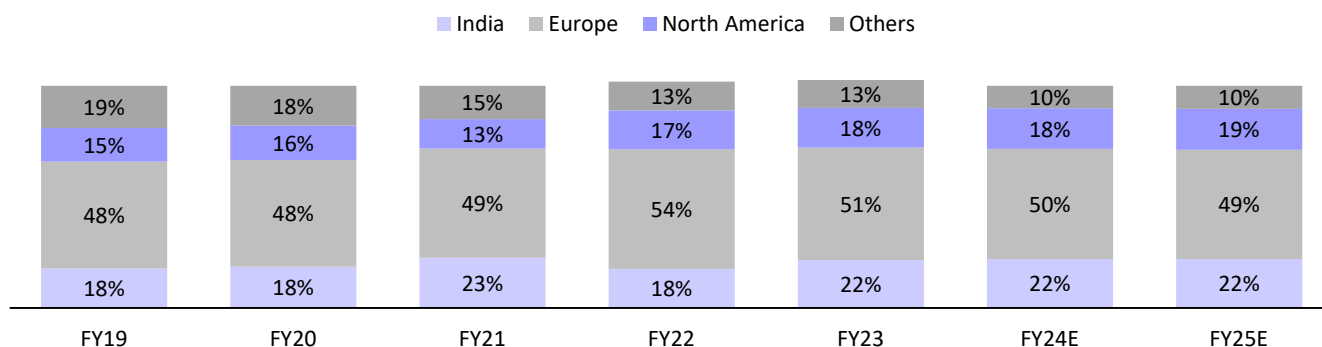
Source: Company, MOFSL

**Exhibit 4: RoE to remain subdued**



Source: Company, MOFSL

**Exhibit 5: Market mix can potentially improve toward the US and India**



Source: Company, MOFSL

## Financials and valuations

### Consolidated - Income Statement

(INR m)

Y/E March	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
<b>Adj. Net Revenues</b>	<b>53,010</b>	<b>49,262</b>	<b>57,652</b>	<b>84,471</b>	<b>1,00,215</b>	<b>1,02,885</b>	<b>1,13,980</b>
Change (%)	13.6	-7.1	17.0	46.5	18.6	2.7	10.8
Raw Materials	24,441	21,388	23,110	37,778	49,153	49,899	54,141
Employees Cost	2,992	3,286	3,709	4,301	4,594	4,824	5,065
Other Expenses	11,646	10,726	12,909	20,785	26,777	22,244	24,763
<b>Total Expenditure</b>	<b>39,079</b>	<b>35,400</b>	<b>39,728</b>	<b>62,864</b>	<b>80,524</b>	<b>76,968</b>	<b>83,969</b>
% of Sales	73.7	71.9	68.9	74.4	80.4	74.8	73.7
<b>EBITDA</b>	<b>13,931</b>	<b>13,863</b>	<b>17,924</b>	<b>21,608</b>	<b>19,691</b>	<b>25,917</b>	<b>30,011</b>
EBITDA Margin (%)	26.3	28.1	31.1	25.6	19.6	25.2	26.3
Depreciation	3,326	3,736	4,163	4,554	5,708	6,404	7,099
<b>EBIT</b>	<b>10,605</b>	<b>10,126</b>	<b>13,761</b>	<b>17,054</b>	<b>13,983</b>	<b>19,513</b>	<b>22,913</b>
EBIT Margin (%)	20.0	20.6	23.9	20.2	14.0	19.0	20.1
Int. and Finance Charges	111	89	114	92	480	418	418
Fx loss/(gain)	-100	0	-180	-390	880	-500	-500
Other Income	990	1,190	1,297	1,920	1,215	1,501	2,106
<b>PBT bef. EO Exp.</b>	<b>11,583</b>	<b>11,228</b>	<b>15,125</b>	<b>19,272</b>	<b>13,838</b>	<b>21,096</b>	<b>25,100</b>
EO Items	0	0	0	-615	-23	0	0
<b>PBT after EO Exp.</b>	<b>11,583</b>	<b>11,228</b>	<b>15,125</b>	<b>18,657</b>	<b>13,816</b>	<b>21,096</b>	<b>25,100</b>
Total Tax	4,029	1,799	3,774	4,852	3,751	5,316	6,325
Eff. Tax Rate (%)	34.8	16.0	25.0	26.0	27.2	25.2	25.2
Minority Interest	0	0	0	0	0	0	0
<b>Reported PAT</b>	<b>7,554</b>	<b>9,429</b>	<b>11,351</b>	<b>13,804</b>	<b>10,064</b>	<b>15,780</b>	<b>18,775</b>
<b>Adjusted PAT</b>	<b>7,554</b>	<b>9,429</b>	<b>11,351</b>	<b>14,260</b>	<b>10,081</b>	<b>15,780</b>	<b>18,775</b>
Change (%)	6.2	24.8	20.4	25.6	-29.3	56.5	19.0

### Consolidated - Balance Sheet

(INR m)

Y/E March	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
Equity Share Capital	387	387	387	387	387	387	387
Total Reserves	46,150	49,696	59,612	68,944	75,183	85,164	97,173
<b>Net Worth</b>	<b>46,537</b>	<b>50,083</b>	<b>59,998</b>	<b>69,330</b>	<b>75,569</b>	<b>85,550</b>	<b>97,560</b>
Total Loans	8,796	9,316	10,006	25,286	33,465	33,465	33,465
Deferred Tax Liabilities	3,255	1,783	2,035	2,509	2,419	2,419	2,419
<b>Capital Employed</b>	<b>58,588</b>	<b>61,182</b>	<b>72,039</b>	<b>97,125</b>	<b>1,11,453</b>	<b>1,21,434</b>	<b>1,33,444</b>
Gross Block	39,355	48,210	52,954	64,051	83,492	96,908	1,05,908
Less: Accum. Deprn.	12,264	15,992	20,115	24,651	30,359	36,763	43,861
<b>Net Fixed Assets</b>	<b>27,091</b>	<b>32,218</b>	<b>32,839</b>	<b>39,401</b>	<b>53,133</b>	<b>60,145</b>	<b>62,046</b>
Capital WIP	6,004	5,866	8,555	12,584	13,916	5,500	5,500
Investment property	772	857	864	793	708	708	708
<b>Total Investments</b>	<b>10,826</b>	<b>10,625</b>	<b>14,177</b>	<b>18,967</b>	<b>20,367</b>	<b>20,367</b>	<b>20,367</b>
<b>Curr. Assets, Loans&amp;Adv.</b>	<b>20,099</b>	<b>18,498</b>	<b>25,230</b>	<b>38,045</b>	<b>35,353</b>	<b>49,390</b>	<b>61,081</b>
Inventory	7,587	6,156	9,397	16,721	16,674	14,094	15,614
Account Receivables	5,171	5,899	7,536	10,962	11,153	12,684	14,052
Cash and Bank Balance	656	691	780	517	763	9,928	17,363
Loans and Advances	6,684	5,752	7,517	9,846	6,763	12,684	14,052
<b>Curr. Liability &amp; Prov.</b>	<b>6,202</b>	<b>6,882</b>	<b>9,626</b>	<b>12,665</b>	<b>12,024</b>	<b>14,676</b>	<b>16,258</b>
Account Payables	3,861	3,837	6,550	8,293	4,921	9,866	10,930
Other Current Liabilities	2,073	2,746	2,750	4,056	6,754	4,228	4,684
Provisions	267	299	326	316	348	582	645
<b>Net Current Assets</b>	<b>13,897</b>	<b>11,616</b>	<b>15,604</b>	<b>25,380</b>	<b>23,330</b>	<b>34,715</b>	<b>44,823</b>
<b>Appl. of Funds</b>	<b>58,589</b>	<b>61,182</b>	<b>72,039</b>	<b>97,125</b>	<b>1,11,453</b>	<b>1,21,434</b>	<b>1,33,444</b>

E: MOFSL Estimates

## Financials and valuations

### Ratios

Y/E March	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
<b>Basic (INR)</b>							
<b>EPS</b>	<b>39.1</b>	<b>48.8</b>	<b>58.7</b>	<b>73.8</b>	<b>52.1</b>	<b>81.6</b>	<b>97.1</b>
Cash EPS	56.3	68.1	80.3	97.3	81.7	114.8	133.9
BV/Share	240.7	259.1	310.4	358.7	390.9	442.6	504.7
DPS	7.5	22.0	17.0	28.0	16.0	30.0	35.0
Payout (%)	23.1	54.4	29.0	39.2	30.7	36.7	36.0
<b>Valuation (x)</b>							
P/E	61.0	48.8	40.6	32.3	45.7	29.2	24.5
Cash P/E	42.3	35.0	29.7	24.5	29.2	20.8	17.8
P/BV	9.9	9.2	7.7	6.6	6.1	5.4	4.7
EV/Sales	8.8	9.5	8.1	5.7	4.9	4.7	4.2
EV/EBITDA	33.6	33.8	26.2	22.5	25.0	18.7	15.9
Dividend Yield (%)	0.3	0.9	0.7	1.2	0.7	1.3	1.5
FCF per share	4.4	20.2	21.5	-35.2	-15.7	73.3	66.3
<b>Return Ratios (%)</b>							
RoE	17.3	19.5	20.6	22.1	13.9	19.6	20.5
RoCE	14.4	16.6	17.5	17.1	10.9	13.8	15.0
RoIC	17.0	20.0	22.3	22.2	14.4	18.0	19.5
<b>Working Capital Ratios</b>							
Fixed Asset Turnover (x)	1.3	1.0	1.1	1.3	1.2	1.1	1.1
Asset Turnover (x)	0.9	0.8	0.8	0.9	0.9	0.8	0.9
Inventory (Days)	52	46	59	72	61	50	50
Debtor (Days)	36	44	48	47	41	45	45
Creditor (Days)	27	28	41	36	18	35	35
<b>Leverage Ratio (x)</b>							
Current Ratio	3.2	2.7	2.6	3.0	2.9	3.4	3.8
Interest Cover Ratio	95.3	113.8	120.9	186.4	29.1	46.6	54.8
Net Debt/Equity	-0.1	0.0	-0.1	0.1	0.2	0.0	0.0

### Consolidated - Cash Flow Statement

(INR m)

Y/E March	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
OP/(Loss) before Tax	11,863	11,393	15,541	19,207	14,326	21,096	25,100
Depreciation	3,326	3,736	4,163	4,554	5,708	6,404	7,099
Interest & Finance Charges	49	-135	-289	-324	116	-792	-1,382
Direct Taxes Paid	-4,076	-2,884	-3,510	-4,579	-3,429	-5,316	-6,325
(Inc)/Dec in WC	-1,934	544	-1,273	-8,289	-1,865	-2,221	-2,673
<b>CF from Operations</b>	<b>9,228</b>	<b>12,653</b>	<b>14,632</b>	<b>10,569</b>	<b>14,855</b>	<b>19,172</b>	<b>21,819</b>
Others	-1,024	-922	-1,242	-1,488	-376	0	0
<b>CF from Operating incl EO</b>	<b>8,204</b>	<b>11,731</b>	<b>13,390</b>	<b>9,080</b>	<b>14,480</b>	<b>19,172</b>	<b>21,819</b>
(Inc)/Dec in FA	-7,344	-7,830	-9,232	-15,889	-17,523	-5,000	-9,000
<b>Free Cash Flow</b>	<b>860</b>	<b>3,901</b>	<b>4,159</b>	<b>-6,809</b>	<b>-3,043</b>	<b>14,172</b>	<b>12,819</b>
(Pur)/Sale of Investments	877	863	-2,891	-3,516	-883	0	0
Others	108	190	388	431	575	1,210	1,800
<b>CF from Investments</b>	<b>-6,360</b>	<b>-6,778</b>	<b>-11,734</b>	<b>-18,975</b>	<b>-17,831</b>	<b>-3,790</b>	<b>-7,200</b>
Inc/(Dec) in Debt	213	279	857	15,498	7,097	0	0
Interest Paid	-115	-88	-114	-90	-420	-418	-418
Dividend Paid	-1,745	-5,126	-2,316	-5,603	-3,091	-5,799	-6,766
Others	0	-13	-3	0	-1	0	0
<b>CF from Fin. Activity</b>	<b>-1,647</b>	<b>-4,947</b>	<b>-1,575</b>	<b>9,804</b>	<b>3,585</b>	<b>-6,217</b>	<b>-7,184</b>
<b>Inc/Dec of Cash</b>	<b>197</b>	<b>7</b>	<b>81</b>	<b>-90</b>	<b>234</b>	<b>9,164</b>	<b>7,435</b>
<b>Net cash flow from financing activities</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
Opening Balance	265	462	468	549	459	693	9,857
<b>Closing Balance</b>	<b>462</b>	<b>468</b>	<b>549</b>	<b>459</b>	<b>693</b>	<b>9,857</b>	<b>17,292</b>

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

NOTES

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

\*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall be within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

#### Disclosures

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. MOFSL is a listed public company, the details in respect of which are available on [www.motilaloswal.com](http://www.motilaloswal.com). MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at <http://online.reports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf>

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (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) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

A graph of daily closing prices of securities is available at [www.nseindia.com](http://www.nseindia.com), [www.bseindia.com](http://www.bseindia.com). Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

#### Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

#### For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg. No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

#### For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts"), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

#### For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets Singapore Pte Ltd ("MOCMSPL") (Co. Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore. As per the approved agreement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of First Schedule of Financial Advisors Act (CAP 110) provided to MOCMSPL by Monetary Authority of Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act, Chapter 289 of Singapore ("the SFA"). Accordingly, if a Singapore person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform MOCMSPL.

#### Specific Disclosures

- 1 MOFSL, Research Analyst and/or his relatives does not have financial interest in the subject company, as they do not have equity holdings in the subject company.
- 2 MOFSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
- 3 MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- 4 MOFSL, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication of research report
- 5 Research Analyst has not served as director/officer/employee in the subject company
- 6 MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 7 MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- 8 MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- 9 MOFSL has not received any compensation or other benefits from third party in connection with the research report
- 10 MOFSL has not engaged in market making activity for the subject company



The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance.
- received compensation/other benefits from the subject company in the past 12 months
- any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 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) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

#### Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

#### Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

#### Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. 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 MOFSL 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 certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 - 71934200 / 71934263;

www.motilaloswal.com. Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000.

Details of Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No.:022-40548085.

Grievance Redressal Cell:

Contact Person	Contact No.	Email ID
Ms. Hemangi Date	022 40548000 / 022 67490600	query@motilaloswal.com
Ms. Kumud Upadhyay	022 40548082	servicehead@motilaloswal.com
Mr. Ajay Menon	022 40548083	am@motilaloswal.com

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412 . AMFI: ARN : 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.

Customer having any query/feedback/ clarification may write to query@motilaloswal.com. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com, for DP to dp@grievances@motilaloswal.com.