

Balkrishna Industries

Estimate change	↔
TP change	↔
Rating change	↔

Bloomberg	BIL IN
Equity Shares (m)	193
M.Cap.(INRb)/(USD\$)	496.2 / 6
52-Week Range (INR)	2645 / 1796
1, 6, 12 Rel. Per (%)	3/17/23
12M Avg Val (INR M)	663

Financials & valuations (INR b)

Y/E March	FY23	FY24E	FY25E
Sales	100.2	91.8	108.0
EBITDA	19.7	22.5	28.5
Adj. PAT	10.1	13.7	18.5
EPS (Rs)	52.1	71.1	95.6
EPS Growth (%)	-29.3	36.4	34.4
BV/Share (INR)	390.9	432.1	492.6

Ratios

RoE (%)	13.9	17.3	20.7
RoCE (%)	10.9	12.1	14.9
Payout (%)	30.7	42.2	36.6

Valuations

P/E (x)	49.2	36.1	26.9
P/BV (x)	6.6	5.9	5.2
Div. yield (%)	0.6	1.2	1.4
FCF yield (%)	-0.6	2.2	2.6

Shareholding pattern (%)

As On	Sep-23	Jun-23	Sep-22
Promoter	58.3	58.3	58.3
DII	21.2	21.0	18.9
FII	12.5	12.4	13.0
Others	7.9	8.3	9.8

FII Includes depository receipts

CMP: INR2,567 TP: INR2,500 (-3%) Neutral

Sequential improvement in overall performance

Capex guidance at INR9b for FY24 (vs. INR6b earlier)

- Balkrishna Industries (BIL)'s 2QFY24 operating performance beat our estimates, as it saw a healthy sequential recovery in overall business, mainly in India. Export markets remain uncertain, but 2H is expected to better than 1H. FY24 volumes are likely to decline.
- We raise our FY24E/FY25E EPS by 3%/2% to factor in favorable FX and better realization. **Maintain Neutral with a TP of INR2,500 (premised on ~22x Dec'25E EPS).**

Realization improvement due to better mix and hedge rate

- BIL's 2QFY24 revenue/EBITDA/PAT declined 10.5%/3%/17% YoY to INR22.5b/INR5.5b/INR3.35b. 1HFY24 revenue/EBITDA/adj. PAT fell 21%/7%/11% YoY.
- Volumes declined 10.5% YoY (up 5% QoQ) to 70.6k tons (in line). The sequential volume improvement was partly led by inventory created in Jun'23, which could not be shipped due to Biparjoy disruptions.
- Realization declined 10.5% YoY (flat QoQ) to INR318.3k/unit (est. INR311.5k), led by a better mix and hedge rate.
- Revenue was down 20% YoY at INR22.5b (est. INR21.6b).
- Gross margins expanded 70bp YoY/20bp QoQ to 51.9% (in line). The RM cycle normalized in 2Q, leading to margin improvement.
- EBITDA margin rose 430bp YoY to 24.4% due to low RM costs and low other expenses, including freight costs (-5pp YoY as % of sales).
- Despite FX gains and higher-than-expected other income, adj. PAT declined 17% YoY to INR3.35b (est. INR3b).
- The board has declared the second interim dividend of INR4/share for FY24 (total dividend of INR8/share so far in FY24).
- FCFF for 1HFY24 stood at INR6.3b (vs. outflow of INR4.4b in 1HFY23), led by improved operating cash flows of INR12.2b (vs. INR4.5b in 1HFY23) and lower capex of INR5.9b (vs. INR8.9b for 1HFY23).

Highlights from the management commentary

- **Outlook:** BIL expects to sustain a stable trajectory, with 2HFY24 to be better. However it expects a slight decline in volumes in FY24.
- **EBITDA margin guidance remains unchanged at 26-28% (vs. ~24.4% in 2Q).** With an uptick in natural rubber/oil prices, RM costs may rise.
- **Capex guidance of INR9b in FY24 (vs. INR6b earlier):** BIL plans to set up a brownfield mould manufacturing facility at its Bhuj plant, given growth prospects there. It presently makes moulds at Dombivali. Mould capacity will be utilized for SKUs of large tyres for agri/OTR purposes. It may do some small brownfield expansions at the Bhuj plant, but it is yet to be finalized. BIL has spent ~INR6b of its INR9b capex in 1HFY24. Maintenance capex would be INR2.5-3b in FY24.

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, Bloomberg, Thomson Reuters, Factset and S&P Capital.

Valuation and view

- While near-term demand remains weak, we believe a recovery should be visible in 2H, consequently driving EBITDA margin expansion to over 25% by 4Q. We expect BIL to continue to outperform the Specialty Tyre industry, driven by the expansion of its product portfolio and a ramp-up in the OTR segment, with scope to strengthen its competitive positioning.
- Current valuations fairly reflect its industry-leading margin, FCF and capital efficiencies. It currently trades at a P/E multiple of 36.1x/26.9x FY24E/FY25E EPS. Maintain **Neutral**.

Quarterly Earning Model (Standalone)

Y/E March									(INR Million)		
	FY23				FY24E				FY23	FY24E	2QE
	1Q	2Q	3Q	4Q	1Q	2Q	3QE	4QE			
Volumes (Ton)	83,153	78,872	66,480	72,676	67,209	70,585	73,128	79,278	3,01,181	2,90,200	69,407
YoY Change (%)	21.2	8.4	-5.5	-5.8	-19.2	-10.5	10.0	9.1	4.3	-3.6	-12.0
Realizations (INR '000/ton)	327.9	355.8	333.2	319.9	314.7	318.3	319.1	320.3	334.4	318.2	311.5
YoY Change (%)	23.0	24.5	12.7	1.4	-4.0	-10.5	-4.2	0.1	14.7	-4.8	-12.4
Net Revenues	27,263	28,063	22,153	23,246	21,150	22,468	23,336	25,396	1,00,725	92,351	21,624
YoY Change (%)	49.1	34.9	6.6	-4.4	-22.4	-19.9	5.3	9.2	19.6	-8.3	-22.9
EBITDA	5,470	5,640	4,233	4,942	4,863	5,480	5,776	6,460	20,284	22,578	5,146
Margins (%)	20.1	20.1	19.1	21.3	23.0	24.4	24.8	25.4	20.1	24.4	23.8
Depreciation	1,262	1,341	1,449	1,515	1,537	1,586	1,590	1,627	5,566	6,341	1,550
Interest	27	43	136	250	208	229	200	176	456	813	200
Forex loss/(gain)	-260	-490	1,660	-30	-330	-250	-200	-120	880	-900	-125
Other Income	-150	580	430	280	660	520	475	472	1,140	2,127	450
PBT before EI	4,290	5,327	1,417	3,487	4,108	4,435	4,661	5,249	14,521	18,452	3,971
Extra-Ord expense	0	0	0	23	0	0	0	0	23	0	0
PBT	4,290	5,327	1,417	3,465	4,108	4,435	4,661	5,249	14,499	18,452	3,971
Rate (%)	25.4	24.1	29.8	26.1	23.9	24.5	24.5	24.7	25.7	24.4	24.5
Reported PAT	3,199	4,043	995	2,559	3,125	3,350	3,519	3,952	10,774	13,946	2,998
Adj PAT	3,199	4,043	995	2,576	3,125	3,350	3,519	3,952	10,791	13,946	2,998
YoY Change (%)	-10.5	1.2	-69.7	-30.5	-2.3	-17.1	253.6	53.4	-25.9	29.2	-25.8
Margins (%)	11.7	14.4	4.5	11.1	14.8	14.9	15.1	15.6	10.7	15.1	13.9

E: MOFSL Estimates

Key Performance Indicators

Y/E March	FY23				FY24E				FY23	FY24E	2Q
	1Q	2Q	3Q	4QE	1Q	2Q	3Q	4QE			
Volumes (Ton)	83,153	78,872	66,480	72,676	67,209	70,585	73,128	79,278	3,01,181	2,90,200	69,407
YoY Change (%)	21.2	8.4	-5.5	-5.8	-19.2	-10.5	10.0	9.1	4.3	-3.6	-12.0
Realizations (INR '000/ton)	327.9	355.8	333.2	319.9	314.7	318.3	319.1	320.3	334.4	318.2	311.5
YoY Change (%)	23.0	24.5	12.7	1.4	-4.0	-10.5	-4.2	0.1	14.7	-4.8	-12.4
Gross Margins (%)	53.4	51.2	48.6	49.3	51.7	51.9	51.9	51.9	50.8	51.8	51.9
EBITDA Margins (%)	20.1	20.1	19.1	21.3	23.0	24.4	24.8	25.4	20.1	24.4	23.8
Gross Profit (INR '000/ton)	175.2	182.2	162.1	157.6	162.6	165.1	165.6	166.1	169.9	164.9	161.7
EBITDA (INR '000/ton)	65.8	71.5	63.7	68.0	72.4	77.6	79.0	81.5	67.3	77.8	74.1

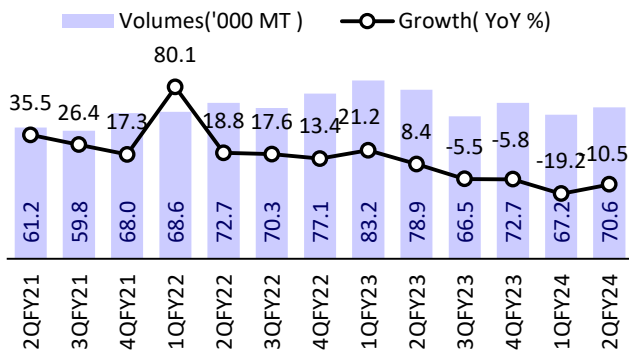


Highlights from the management commentary

- **Demand:** In 2Q, export markets were affected by heat waves and recessionary pressures. The management feels that the worst is over for export markets and that it is monitoring new geopolitical tensions. Inventory in the export markets has normalized, but the confidence level in the distribution channel remains moderate (dealers carrying 2-3 months of inventory). Dispatches to global markets are marginally lower, with a slow and gradual recovery expected. On the contrary, India business is on a strong footing thanks to the government's support for infrastructure and growth in agriculture.
- **Outlook:** BIL expects to sustain a stable trajectory, with 2HFY24 to be better. As a result, it expects FY24 volumes to decline marginally.
- **BIL's India business currently holds a market share of 4-5%**, considering it started just six years ago. The company aims to increase its **India market share to 10%**, in line with its target for a global market share. Its global market share of 10% would be driven by new product launches like solid track tyres, etc.
- **EBITDA margin guidance remains unchanged at 26-28% (vs. ~24.4% in 2Q):** With an uptick in natural rubber and oil prices, RM costs may rise in the coming quarters. It will evaluate price hikes to pass on cost inflation. However, with favorable EUR/INR (FY25E 25-30% exposure is hedged at 93-94 level vs. 88.25 in 1HFY24) and a better mix, it has maintained medium-term EBITDA margin guidance at 26-28%.
- **ASP improvement sequentially in 2Q was due to a better hedge rate and a better mix.** The EUR-INR hedge rate stood at 89 in 2Q. It is expected to be around 89-90 in FY24 and 93-94 in FY25 (30% covered till now). BIL expects ASPs to remain stable at these levels.
- **Capex guidance of INR9b in FY24 (vs. INR6b declared earlier):** BIL plans to set up a brownfield mould manufacturing facility at its Bhuj plant, given growth prospects. It presently makes moulds at Dombivali. Mould capacity will be utilized for SKUs of large tyres for agri/OTR purposes. It may do some small brownfield expansions at the Bhuj plant, but it is yet to be finalized. BIL has already spent a majority (~INR6b) of its INR9b capex in 1HFY24. Maintenance capex would be INR2.5-3b in FY24.
- About 6-7% of total sales would be the sale of carbon black to other suppliers. Its advanced carbon black plant would be commercialized by 2HFY25 and would contribute INR4-6b to incremental revenue at full capacity.
- 1HFY24 working capital improvement was due to normalization of inventory, and the company expects to sustain it at this level.
- **Gross debt stood at INR28.3b as on 30th Sep'23**, with 75% of it contributing to working capital requirement. Cash on the balance sheet stands at INR2.3b.

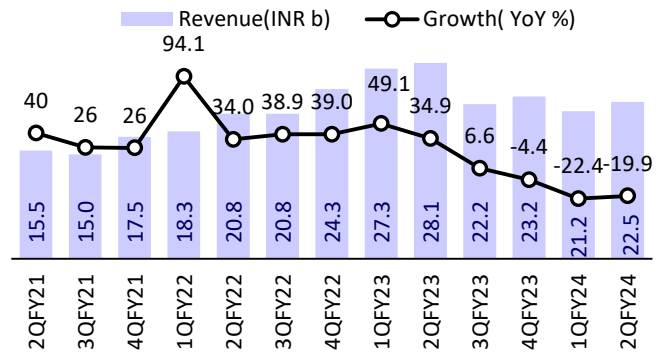
Key exhibits

Exhibit 1: Volume trends



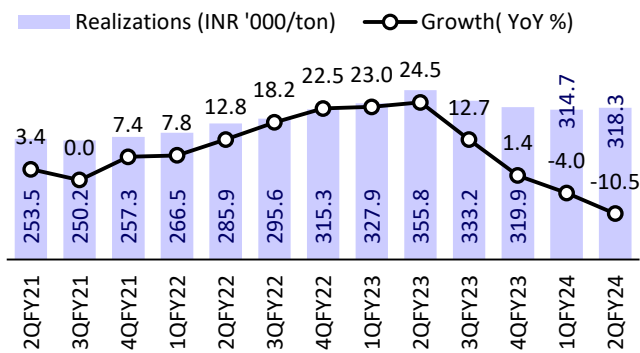
Source: MOFSL, Company

Exhibit 2: Revenue trends



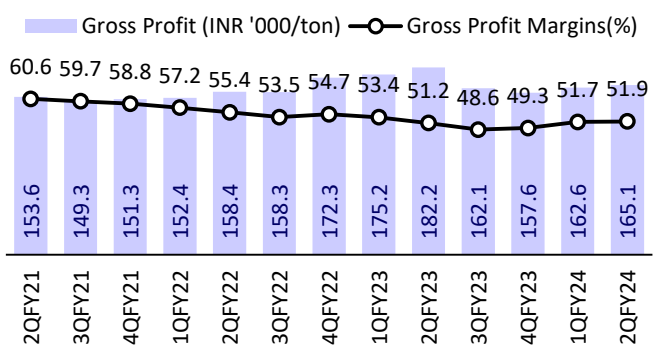
Source: MOFSL, Company

Exhibit 3: Net realization trends



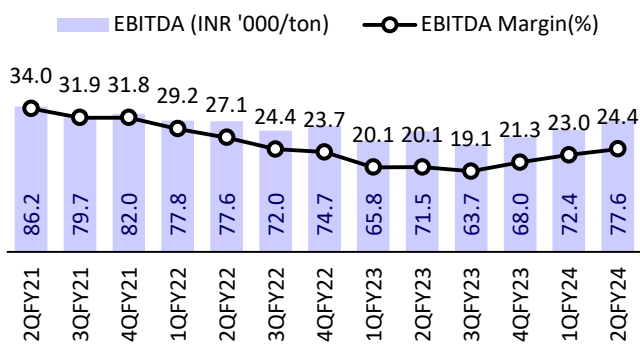
Source: MOFSL, Company

Exhibit 4: Gross profit margin trends



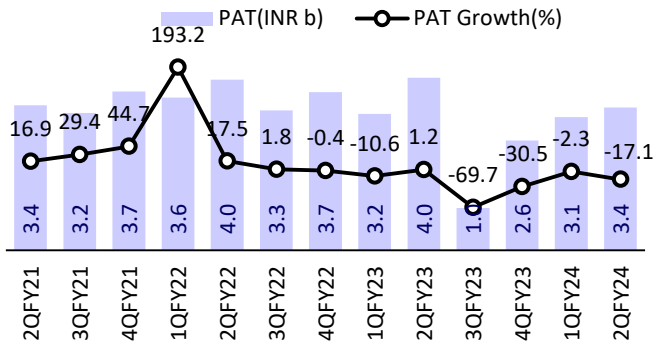
Source: MOFSL, Company

Exhibit 5: EBITDA margin trends



Source: MOFSL, Company

Exhibit 6: PAT and PAT growth trends



Source: MOFSL, Company

Exhibit 7: Geography-wise contribution

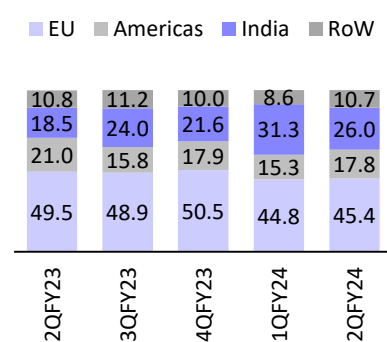


Exhibit 8: Channel-wise sales

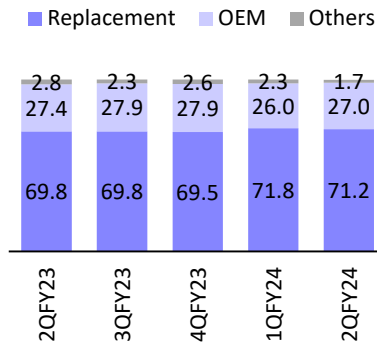
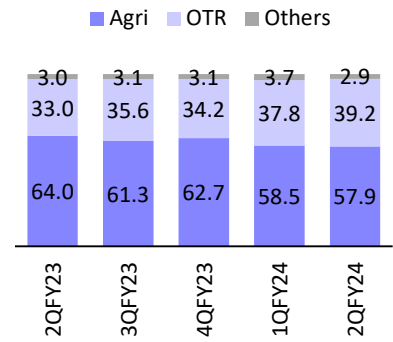


Exhibit 9: Segment-wise sales



Source: Company, MOFSL

Valuation and view

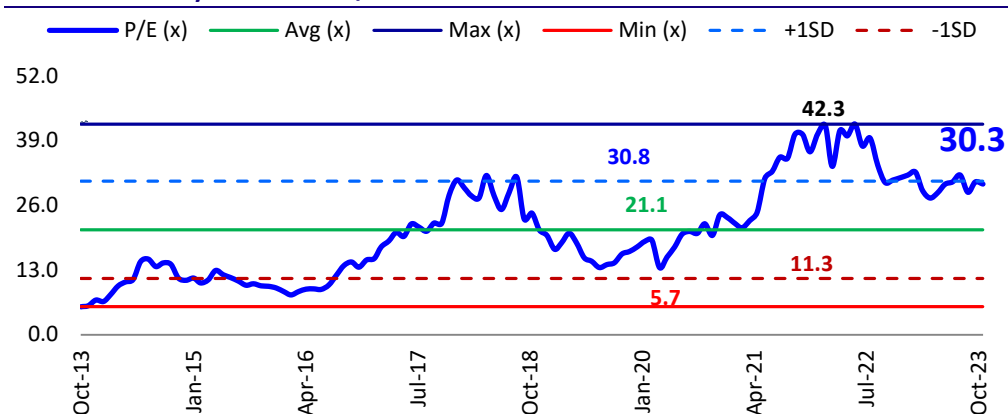
Huge opportunity size, strong competitive positioning

- **Profitable market share gains to continue:** We expect BIL to continue to outperform the industry, with scope to strengthen its competitive positioning. BIL has a well-established competitive advantage, which has enabled consistent market share gains. Its competitive advantage is driven by: a) competitive cost and pricing, b) consistent product portfolio expansion, and c) expanding reach. With a current market share of 5-6% in the USD15b global Specialty Tyre segment, BIL aspires to increase this to 10% over next four-to-five years by: a) ramp-up in OTR segment, which is much larger than Agri Tyres, b) strengthening its presence in North America and RoW markets, and c) gaining share with OEMs. We estimate ~5%/4% volume/revenue CAGR over FY23-25E.
- **Investing to improve its competitiveness:** The management has invested over ~INR30b in the last three years toward expanding capacity in tyres as well as carbon black and modernization & automation. At the company level, achievable capacity stands at 360k MTPA. As a percentage of sales, capex intensity would start moderating in FY24-25 to ~7-10% of sales (v/s last five years average of 16%), driving improvement in FCF generation.
- **Earnings growth to pick-up:** We estimate consol revenue/EBITDA/PAT for BIL to grow at 4%/20%/35% over FY23-25E. We expect improvement in EBITDA margin over FY23-25E to ~26.4% (vs 19.6% in FY23), led by stable RM and benefits of operating leverage. Despite a rise in capex estimate for FY24E of INR9b, we expect FCF generation to start at INR10.9b.
- **Valuations factor in a focused business model:** We raise our FY24E/FY25E EPS by 3%/2% to account for favorable FX and better realization. BIL has the top ranking among domestic peers in terms of cost competitiveness and financial strength. In terms of valuation, it trades at a substantial premium to its mainstream peers. Premium valuations fairly reflect its industry-leading margin, FCF and capital efficiency. It currently trades at 36.1x/26.9x of FY24E/FY25E EPS. We value BIL at 22x Dec'25E EPS (vs. 10-year LPA of ~20x) to arrive at a TP of INR2,500. We maintain our **Neutral** rating.

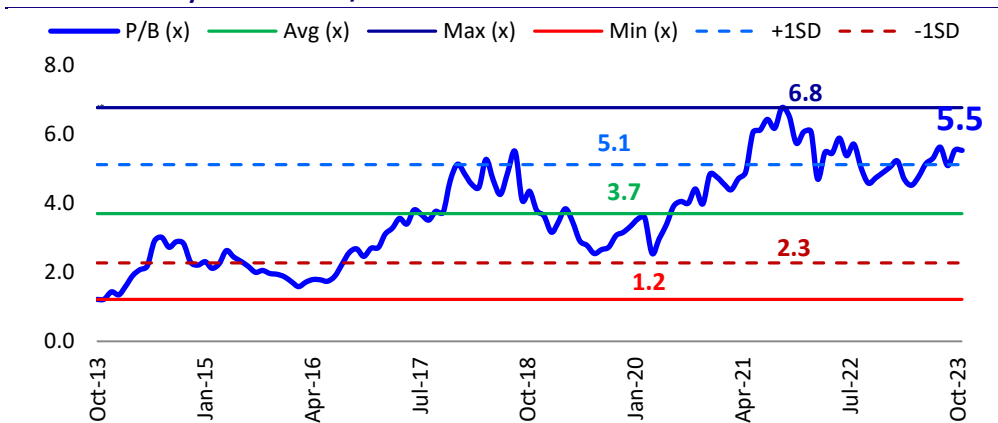
Exhibit 10: Revisions to our estimates

(INR M)	FY24E			FY25E		
	Rev	Old	Chg (%)	Rev	Old	Chg (%)
Net Sales	91,841	90,607	1.4	1,08,011	1,06,557	1.4
EBITDA	22,496	22,029	2.1	28,538	28,075	1.6
EBITDA (%)	24.5	24.3	20bp	26.4	26.3	10bp
Adj. PAT	13,746	13,325	3.2	18,472	18,184	1.6
EPS (INR)	71.1	68.9	3.2	95.6	94.1	1.6

Source: MOFSL, Company

Exhibit 11: One-year forward P/E

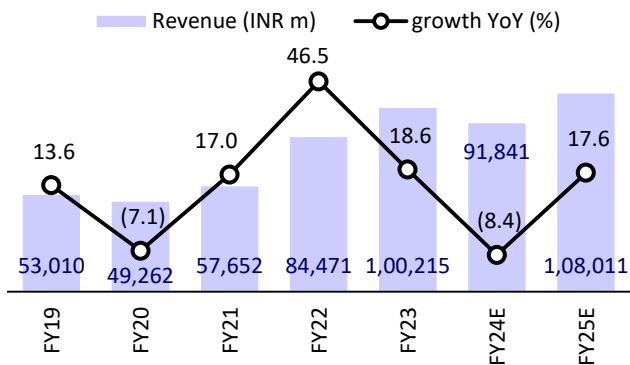
Source: MOFSL, Company

Exhibit 12: One-year forward P/B band

Source: MOFSL, Company

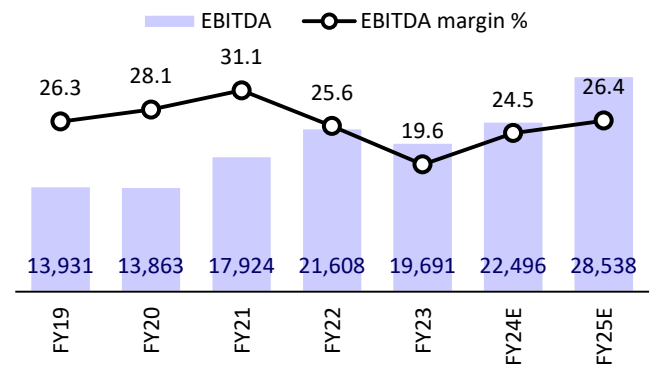
Story in charts

Exhibit 13: Revenue to see ~4% CAGR over FY23-25E



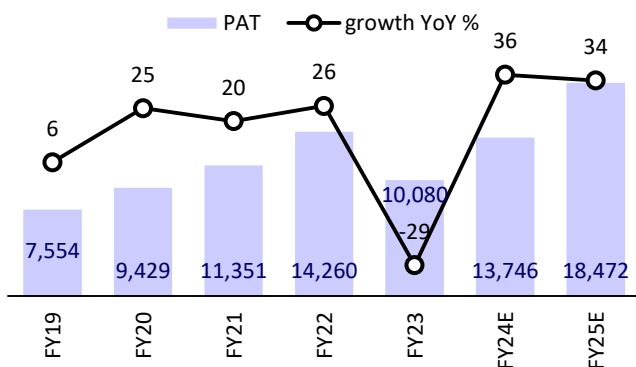
Source: Company, MOFSL

Exhibit 14: EBITDA margin to improve over FY23-25E



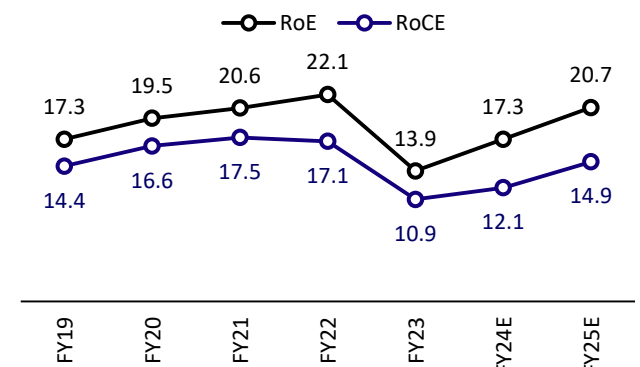
Source: Company, MOFSL

Exhibit 15: PAT to grow by ~35% CAGR over FY23-25E



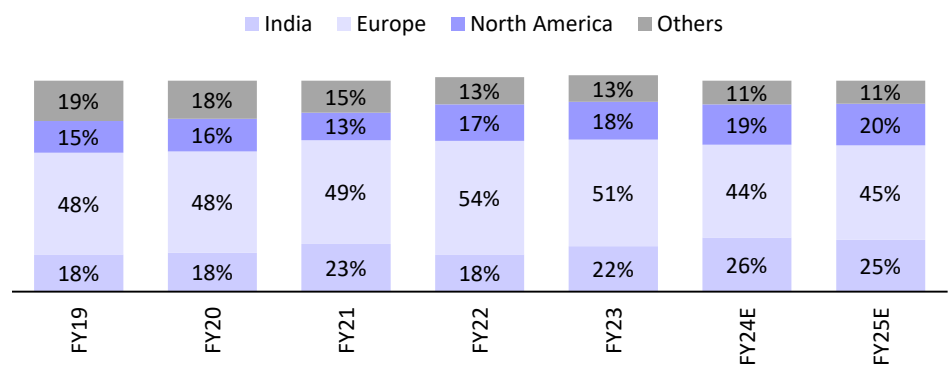
Source: Company, MOFSL

Exhibit 16: RoE to remain subdued



Source: Company, MOFSL

Exhibit 17: Market mix can potentially improve toward the US and Europe



Source: Company, MOFSL

Financials and valuations

Consolidated - Income Statement						(INR Million)	
Y/E March	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
Adj. Net Revenues	53,010	49,262	57,652	84,471	1,00,215	91,841	1,08,011
Change (%)	13.6	-7.1	17.0	46.5	18.6	-8.4	17.6
Raw Materials	24,441	21,388	23,110	37,778	49,153	44,084	51,305
Employees Cost	2,992	3,286	3,709	4,301	4,594	4,985	5,284
Other Expenses	11,646	10,726	12,909	20,785	26,777	20,277	22,884
Total Expenditure	39,079	35,400	39,728	62,864	80,524	69,345	79,474
% of Sales	73.7	71.9	68.9	74.4	80.4	75.5	73.6
EBITDA	13,931	13,863	17,924	21,608	19,691	22,496	28,538
EBITDA Margin (%)	26.3	28.1	31.1	25.6	19.6	24.5	26.4
Depreciation	3,326	3,736	4,163	4,554	5,708	6,482	6,891
EBIT	10,605	10,126	13,761	17,054	13,983	16,013	21,647
EBIT Margin (%)	20.0	20.6	23.9	20.2	14.0	17.4	20.0
Int. and Finance Charges	111	89	114	92	480	837	753
Fx loss/(gain)	-100	0	-180	-390	880	-900	-1,000
Other Income	990	1,190	1,297	1,920	1,215	2,202	2,572
PBT bef. EO Exp.	11,583	11,228	15,125	19,272	13,838	18,279	24,466
EO Items	0	0	0	-615	-23	0	0
PBT after EO Exp.	11,583	11,228	15,125	18,657	13,815	18,279	24,466
Total Tax	4,029	1,799	3,774	4,852	3,751	4,533	5,994
Eff. Tax Rate (%)	34.8	16.0	25.0	26.0	27.2	24.8	24.5
Minority Interest	0	0	0	0	0	0	0
Reported PAT	7,554	9,429	11,351	13,804	10,064	13,746	18,472
Adjusted PAT	7,554	9,429	11,351	14,260	10,080	13,746	18,472
Change (%)	6.2	24.8	20.4	25.6	-29.3	36.4	34.4

Consolidated - Balance Sheet						(INR Million)	
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	83,129	94,836
Net Worth	46,537	50,083	59,998	69,330	75,569	83,516	95,222
Minority Interest	0	0	0	0	0	0	0
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
Capital Employed	58,588	61,182	72,039	97,125	1,11,453	1,19,400	1,31,106
Gross Block	39,355	48,210	52,954	64,051	83,240	1,00,656	1,08,156
Less: Accum. Deprn.	12,264	15,992	20,115	24,651	30,108	36,590	43,481
Net Fixed Assets	27,091	32,218	32,839	39,401	53,133	64,067	64,676
Goodwill on Consolidation	0	0	0	0	0	0	0
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
Total Investments	10,826	10,625	14,177	18,967	20,367	20,367	20,367
Curr. Assets, Loans&Adv.	20,099	18,498	25,230	38,045	35,353	41,859	55,263
Inventory	7,587	6,156	9,397	16,721	16,674	12,581	14,796
Account Receivables	5,171	5,899	7,536	10,962	11,153	11,323	13,316
Cash and Bank Balance	656	691	780	517	763	6,632	13,834
Loans and Advances	6,684	5,752	7,517	9,846	6,763	11,323	13,316
Curr. Liability & Prov.	6,202	6,882	9,626	12,665	12,024	13,100	15,407
Account Payables	3,861	3,837	6,550	8,293	4,921	8,807	10,357
Other Current Liabilities	2,073	2,746	2,750	4,056	6,754	3,774	4,439
Provisions	267	299	326	316	348	519	611
Net Current Assets	13,897	11,616	15,604	25,380	23,330	28,759	39,856
Appl. of Funds	58,589	61,182	72,039	97,125	1,11,453	1,19,400	1,31,106

E: MOFSL Estimates

Financials and valuations

Ratios

Y/E March	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
Basic (INR)							
EPS	39.1	48.8	58.7	73.8	52.1	71.1	95.6
Cash EPS	56.3	68.1	80.3	97.3	81.7	104.6	131.2
BV/Share	240.7	259.1	310.4	358.7	390.9	432.1	492.6
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	42.2	36.6
Valuation (x)							
P/E	65.0	52.1	43.2	34.4	48.7	35.7	26.6
Cash P/E	45.1	37.3	31.6	26.1	31.1	24.3	19.4
P/BV	10.5	9.8	8.2	7.1	6.5	5.9	5.2
EV/Sales	9.4	10.1	8.7	6.1	5.2	5.6	4.7
EV/EBITDA	35.8	36.0	27.9	23.9	26.6	23.0	17.9
Dividend Yield (%)	0.3	0.9	0.7	1.1	0.6	1.2	1.4
FCF per share	4.4	20.2	21.5	-35.2	-15.7	56.4	66.1
Return Ratios (%)							
RoE	17.3	19.5	20.6	22.1	13.9	17.3	20.7
RoCE	14.4	16.6	17.5	17.1	10.9	12.1	14.9
RoIC	17.0	20.0	22.3	22.2	14.4	14.7	18.3
Working Capital Ratios							
Fixed Asset Turnover (x)	1.3	1.0	1.1	1.3	1.2	0.9	1.0
Asset Turnover (x)	0.9	0.8	0.8	0.9	0.9	0.8	0.8
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
Leverage Ratio (x)							
Current Ratio	3.2	2.7	2.6	3.0	2.9	3.2	3.6
Interest Cover Ratio	95.3	113.8	120.9	186.4	29.1	19.1	28.7
Net Debt/Equity	-0.1	0.0	-0.1	0.1	0.2	0.1	0.0

Consolidated - Cash Flow Statement

Y/E March	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
OP/(Loss) before Tax	11,863	11,393	15,541	19,207	14,325	18,279	24,466
Depreciation	3,326	3,736	4,163	4,554	5,708	6,482	6,891
Interest & Finance Charges	49	-135	-289	-324	116	-773	-1,197
Direct Taxes Paid	-4,076	-2,884	-3,510	-4,579	-3,429	-4,533	-5,994
(Inc)/Dec in WC	-1,934	544	-1,273	-8,289	-1,865	440	-3,896
CF from Operations	9,228	12,653	14,632	10,569	14,855	19,895	20,270
Others	-1,024	-922	-1,242	-1,488	-376	0	0
CF from Operating incl EO	8,204	11,731	13,390	9,080	14,480	19,895	20,270
(Inc)/Dec in FA	-7,344	-7,830	-9,232	-15,889	-17,523	-9,000	-7,500
Free Cash Flow	860	3,901	4,159	-6,809	-3,043	10,895	12,770
(Pur)/Sale of Investments	877	863	-2,891	-3,516	-883	0	0
Others	108	190	388	431	575	1,610	1,950
CF from Investments	-6,360	-6,778	-11,734	-18,975	-17,831	-7,390	-5,550
Issue of Shares	0	0	0	0	0	0	0
Inc/(Dec) in Debt	213	279	857	15,498	7,097	0	0
Interest Paid	-115	-88	-114	-90	-420	-837	-753
Dividend Paid	-1,745	-5,126	-2,316	-5,603	-3,091	-5,799	-6,766
Others	0	-13	-3	0	-1	0	0
CF from Fin. Activity	-1,647	-4,947	-1,575	9,804	3,585	-6,636	-7,518
Inc/Dec of Cash	197	7	81	-90	234	5,869	7,201
Net cash flow from financing activities	0	0	6	1	0	0	0
Opening Balance	265	462	468	549	459	693	6,562
Closing Balance	462	468	549	459	693	6,562	13,763

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. 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, 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, nor 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.

This report is meant for the clients of Motilal Oswal only.

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

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 dpgrievances@motilaloswal.com.