

BSE SENSEX 60,224 S&P CNX 17,711



#### Stock Info

Bloomberg	GRASIM IN
Equity Shares (m)	657
M.Cap.(INRb)/(USDb)	1053.2 / 12.9
52-Week Range (INR)	1839 / 1273
1, 6, 12 Rel. Per (%)	-1/-7/-1
12M Avg Val (INR M)	1398
Free float (%)	57.3

#### Financials Snapshot (INR b)

Y/E March	FY23E	FY24E	FY25E
Sales	265.4	276.6	312.7
EBITDA	34.7	35.7	35.4
Adj. PAT	22.9	21.7	17.8
EBITDA Margin (%)	13.1	12.9	11.3
S/A Adj. EPS (INR)	34.8	33.0	27.1
S/A EPS Gr. (%)	2.6	-5.1	-18.0
Consol EPS (INR)	100.5	100.5	98.7
BV/Sh. (INR)	765.2	789.7	806.8

#### Ratios

Net D:E	0.1	0.1	0.1
RoE (%)	9.8	8.5	5.7
RoCE (%)	11.3	9.3	7.0
<b>Valuations</b>			
P/E (x)	45.9	48.3	58.9
P/BV (x)	4.1	4.6	4.4
Div. Yield (%)	0.5	0.5	0.6
FCF Yield (%)	-3.4	-2.3	-1.2

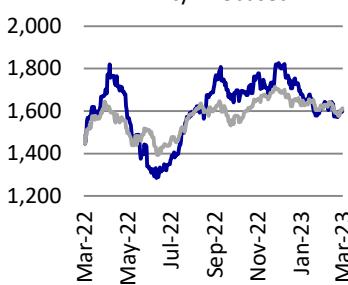
#### Shareholding pattern (%)

As On	Dec-22	Sep-22	Dec-21
Promoter	42.8	42.8	42.5
DII	16.5	16.9	14.7
FII	16.8	16.2	13.1
Others	24.0	24.2	29.7

FII Includes depository receipts

#### Stock's performance (one-year)

Grasim Inds  
Nifty - Rebased



**CMP: INR1,600 TP: INR1,900 (+19%)**

**Buy**

#### Focusing on growth opportunities in core businesses

**VSF demand to see 8-10% CAGR; Chemical business to maintain leadership position**

At GRASIM's analyst meet, the management highlighted growth opportunities in core businesses, near-term challenges, strengths and market positioning, diversified chemical portfolio, sustainability initiatives and progress in high-growth businesses.

#### VSF segment: ranked #2 in world and #1 in India

- There are three basic fibers available globally – 1) cotton, 2) polyester (PSF), and 3) viscose staple (VSF). In global fiber production, the share of Cotton, PSF and VSF stood at 24-26%, 65-70% and 6-7%, respectively.
- Polyester is a synthetic material, which is durable and easy to maintain. However, it is not biodegradable. VSF and Cotton are used as a blend with PSF. VSF is a factory produce (made from wood pulp), a renewable and 100% biodegradable product.
- GRASIM is the largest VSF producer in India with a total capacity of 824KTPA. GRASIM's market share in VSF stood at ~90% in India. The management expects to see a CAGR of 8-10% in VSF demand over the next 10 years. The company is also the largest producer of Viscose filament yarn (VFY) in India. GRASIM's RAYSIL is the most popular VFY brand.
- GRASIM's LIVA is a well-known VSF brand. The company has also started using VSF in sarees with the 'Navyasa' brand. Management noted that 1kg of VSF can make three sarees and currently VSF usage in the saree segment is ~50 tonne per day. There is huge headroom for growth in this segment.
- It has also developed technology for the usage of used cotton garments in place of pulp for VSF production and aims to replace 25-30% of pulp usage. GRASIM focuses on technology development and has received INR2.5b in funds from the Central government for technology development (largest government funding for technology development in textiles segment).
- VSF imports account for ~10-12% of total VSF consumption in India. VSF imports attract 5% basic custom duty. However, imports from Indonesia and Taiwan are duty free because of FTAs — a key challenge.
- Earlier, in Aug'21, the government revoked anti-dumping duty (ADD) on VSF. A representation has been made to the government to levy ADD again on VSF imports as it is not a level playing situation as imports of raw materials (such as Pulp) are not duty free.
- Water consumption by GRASIM for VSF production is the lowest globally. It consumes 17 cubic meter water per tonne of VSF produced (v/s 40 cubic meter per tonne being the best metrics in China). It is implementing zero liquid discharge plans across plants under sustainability initiatives.
- The company generates 10MW power from process waste steam in pulp manufacturing, which leads to savings of 1 lac tonne of coal, annually.

- In 3QFY23, the VSF business reported an operating loss due to macro headwinds as input prices were very abnormal and demand was weak. However, there is a recovery in demand as well as in VSF prices.

#### Chemical segment: a pan-India player with leading positions in three areas

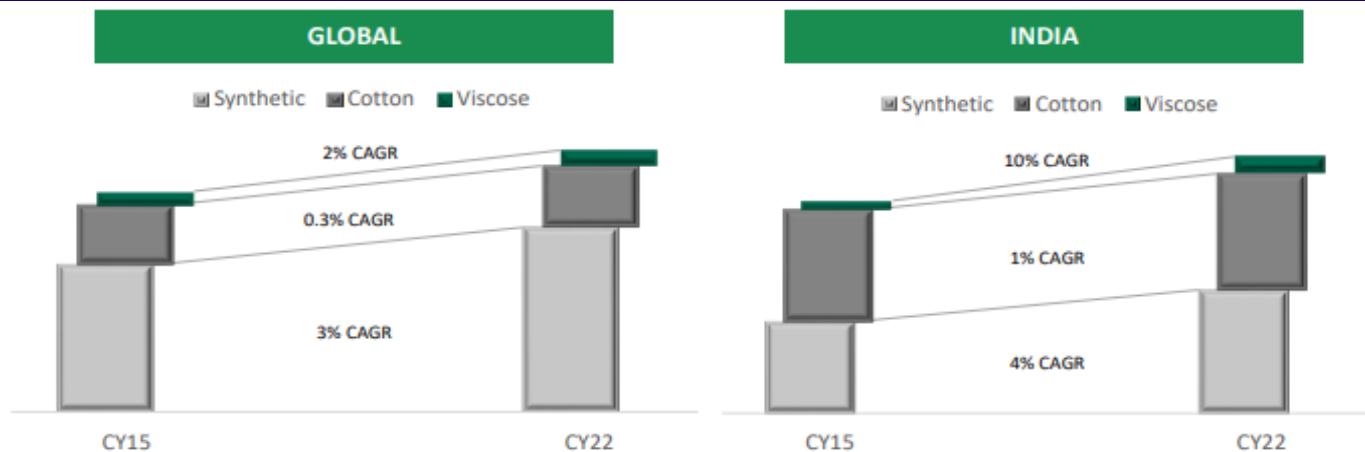
- GRASIM has leading market position in three areas of the Chemical business – 1) it has a 27-30% market share in caustic soda in India which it aims to maintain; 2) it has the largest chlorine integration capacity of ~60%, which will reach to 72% post the commissioning of ongoing projects; 3) it is the largest Epoxy player with more than 50% market share.
- The company's revenue mix in the Chemical business in FY22 – 52% from Chlor-Alkali business (out of which 27-30% used in backward integration), 30% from specialty chemicals and 18% from chlorine derivatives.
- Average EBITDA margin of the Chemical segment in the last five years stood at 19-22%. This segment has been generating annual free cash flow of INR6-7b for the last few years. RoCE has been in the range of 19-22% for the last five years. The company expects to incur a capex of INR15b in this segment in FY23.
- GRASIM is the largest producer of Epoxy in India. It is doubling the capacity of epoxy polymers from 123KTPA to 246KTPA, which will further strengthen its market share in this segment.
- GRASIM is a major supplier (holds almost entire market share) of Epoxy resin used in manufacturing of blades of wind mills. With a pickup in the pace of construction activity and a thrust on renewable energy, this segment has huge growth potential.
- In the last board meeting, the board had approved a capex of INR3.63b for two new Chlorine derivatives (Chloromethane & Carbon Tetrachloride).
- There is not much import of caustic soda into India. Caustic soda imports attract 7.5% of basic custom duty.

#### Other highlights

- The company is committed to sustainability and invests in renewable energy. Its renewable energy capacity stood at 650MW, which will increase to 950MW by FY23-end and 2GW by FY24-end. Currently the company's renewable power portfolio comprises mainly solar power. However, it is also exploring wind energy and hydro power to reach 2GW of renewable power.
- **High-growth businesses:** The company continues to evaluate new high-growth opportunities. Currently, GRASIM is investing in two high-growth businesses, Paints and B2B e-commerce. The company has committed a total capex of INR100b for Paints (including working capital) and INR20b for B2B e-commerce. Plant construction in Paints is progressing across six locations and the commissioning should start from 4QFY24. It expects all capacities to become operational by FY25-end.

#### View and valuation

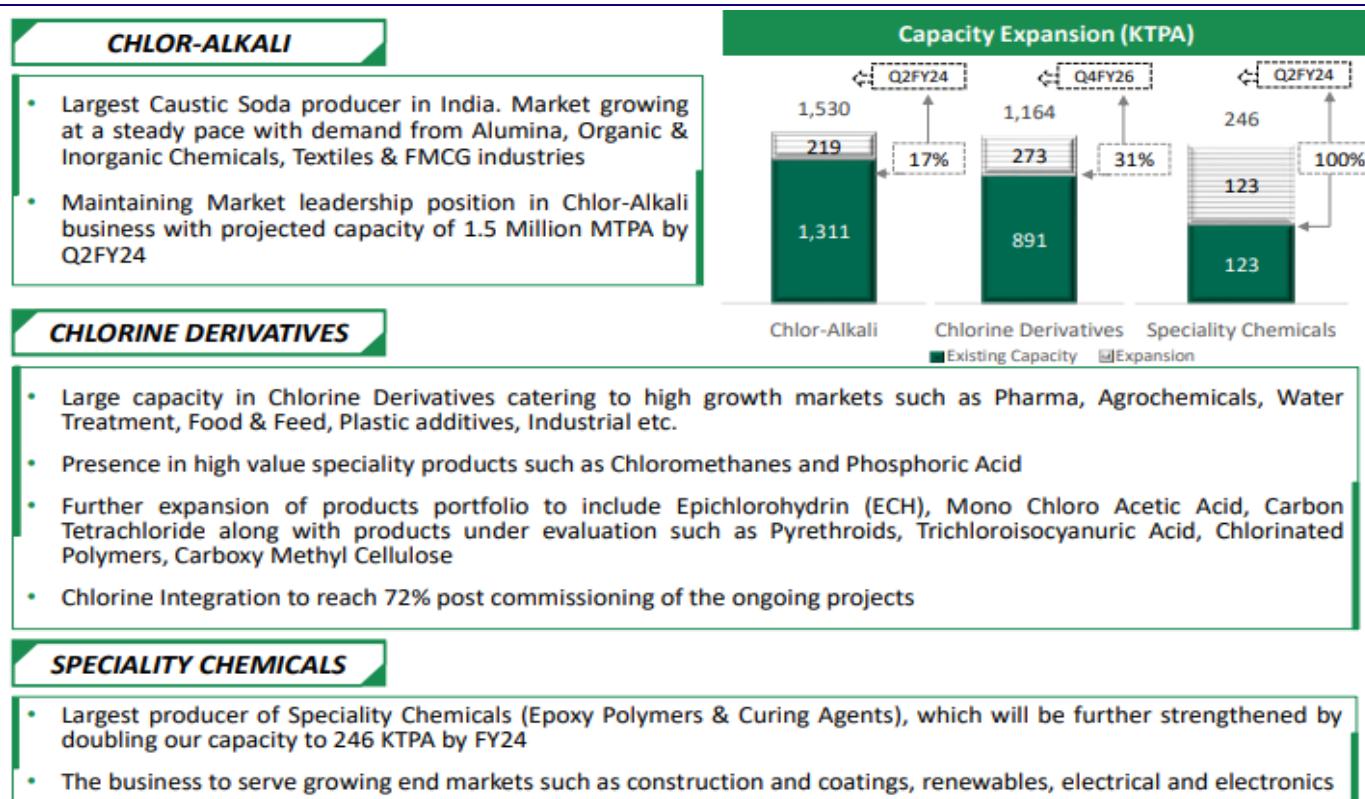
- We have a BUY rating on the stock with a TP of INR1,900, as we value: 1) its holding in subsidiary companies by assigning a discount of 35%; 2) standalone business at 6.5x EV/EBITDA, and 3) investments in the Paints business at 1x of investments (excluding our assumptions of working capital requirements out of announced capex).

**Exhibit 1: Inter fiber dynamics – India Viscose industry growing at a faster pace vs. globally**

- Viscose demand in India is increasing at a faster pace led by intensive business development initiatives and support to textile value chain under “LIVA” brand by the company
- Viscose has huge growth potential as it's share in global fibre basket is merely at 6%
- Huge opportunity to bridge the burgeoning cellulosic gap as there are limitations to cotton supply

**INDIA VISCOSE INDUSTRY GROWING AT FASTEST PACE WITH CAGR HIGHER THAN 2X OF OTHER FIBRES**

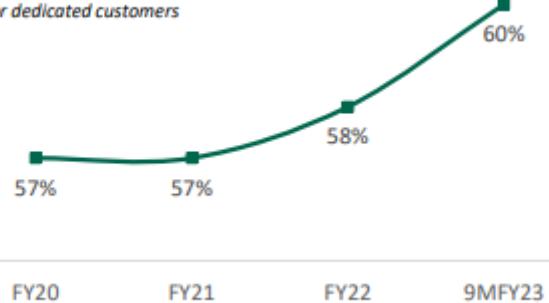
Source: Company

**Exhibit 2: Expanding capacity across Chemicals portfolio**

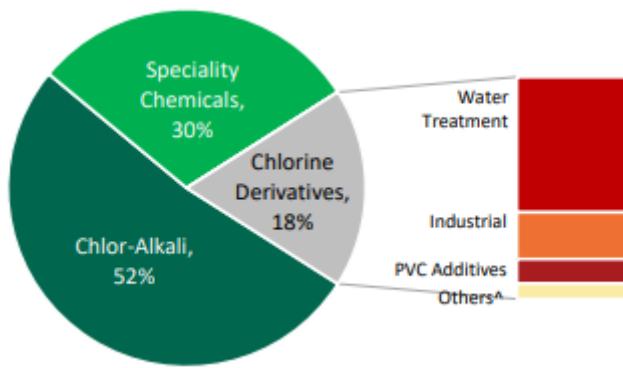
Source: Company

**Exhibit 3: Chlorine integration improves**

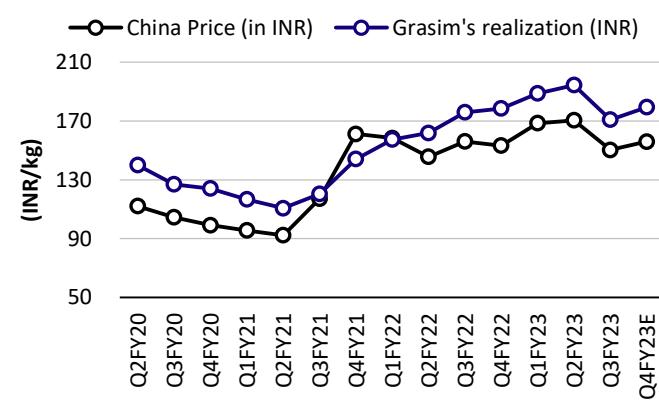
Integration includes chlorine consumption for HCL and pipeline sales for dedicated customers



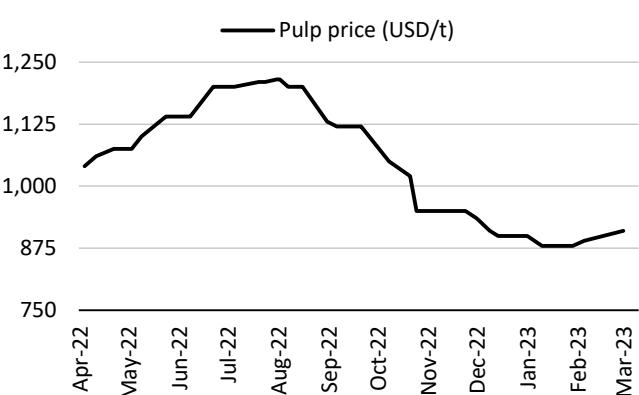
Source: Company

**Exhibit 4: Chemical segment – revenue break-up (FY22)**

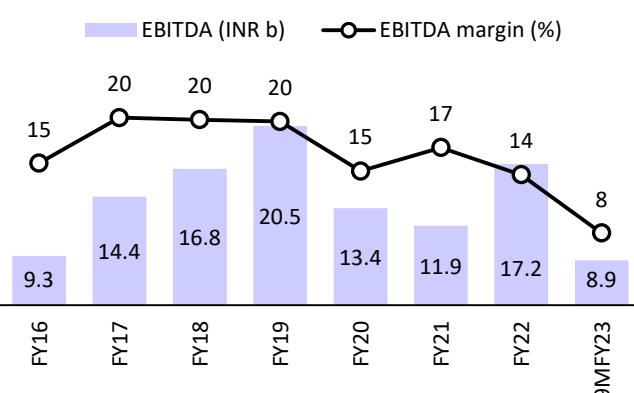
Source: Company

**Story in charts****Exhibit 5: China's VSF price v/s Grasim's VSF realization**

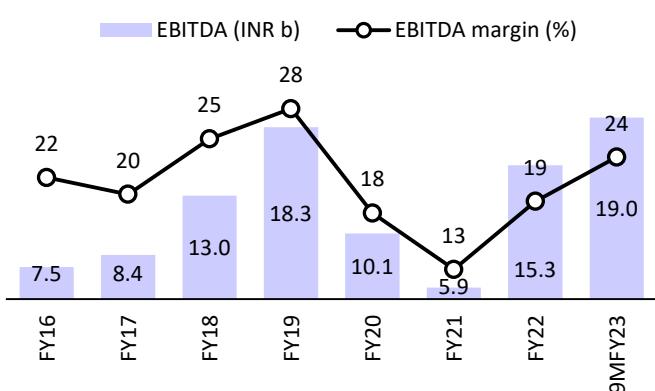
Source: MOFSL, Company, Industry

**Exhibit 6: Pulp price softened in the last few months**

Source: MOFSL, Industry

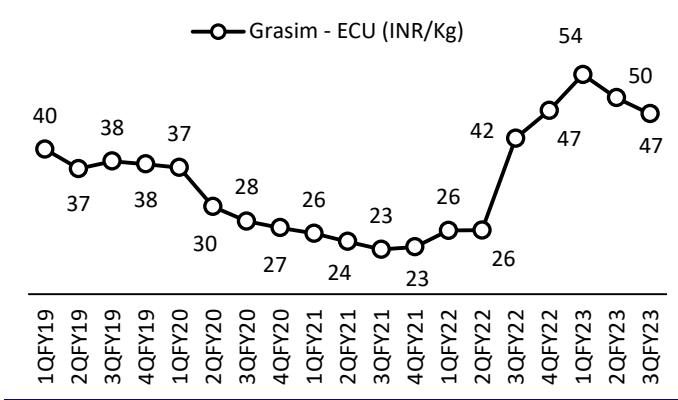
**Exhibit 7: VSF EBITDA margin were under pressure due to higher input costs and lower demand**

Source: MOFSL, Company

**Exhibit 8: Chemical segment EBITDA margin improved led by better volume growth and realization**

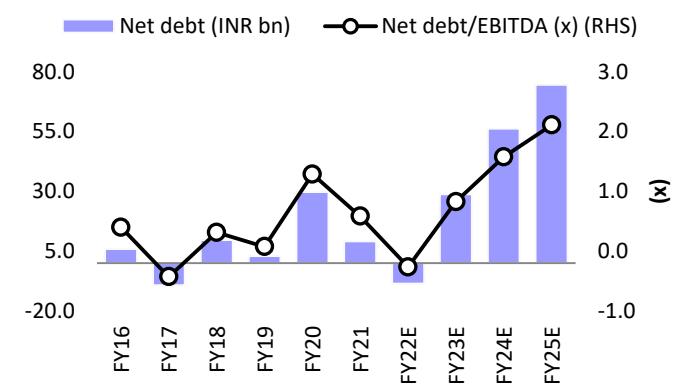
Source: MOFSL, Company

## Exhibit 9: ECU corrects from its peak



Source: MOFSL, Company

## Exhibit 10: Net debt to increase considering investments in Paint business



Source: MOFSL, Company

## Exhibit 11: SOTP valuation

Particulars	Valuation method	Unit	Sep'24E	INR/share
UTCEM's m-cap based on TP		INR b	2,220	
Holding company discount		%	35	
GRASIM's stake		%	57	
<b>Value of its cement stake</b>		<b>INR b</b>	<b>826</b>	
<b>Value/share</b>	<b>A 35% holding company to our TP</b>	<b>INR</b>	<b>1,257</b>	
Value of standalone business (excluding-Paint)		INR b	241	
<b>Value/share</b>	<b>6.5x for the standalone business</b>	<b>INR</b>	<b>367</b>	
Value of listed investments		INR b	68	
Holding company discount		%	35	
<b>The value of listed investments after levying a holding company discount</b>		<b>INR b</b>	<b>44</b>	
<b>Value/share</b>	<b>A 35% holding company discount on the CMP</b>	<b>INR</b>	<b>67</b>	
VSF and Fiber JV		INR b	7.8	
<b>Value/share</b>	<b>1x P/BV</b>	<b>INR</b>	<b>12</b>	
Standalone net debt		INR b	(66)	
<b>Value/share</b>		<b>INR</b>	<b>(100)</b>	
ABCAP		INR b	350	
Holding company discount		%	35	
GRASIM's stake		%	54	
<b>Value of ABCAP's stake in GRASIM</b>		<b>INR b</b>	<b>124</b>	
<b>Value/share</b>	<b>A 35% holding company discount on the CMP</b>	<b>INR</b>	<b>188</b>	
Paint Business	<b>1x of invested capital</b>	INR b	71.5	
<b>Value/share</b>		<b>INR</b>	<b>109</b>	
<b>SoTP-based TP</b>		<b>INR</b>	<b>1,900</b>	

## Exhibit 12: Holding company discount increased to 43%



Source: MOFSL, Company

## Financials and valuations

### Standalone Income Statement

	(INR m)							
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
<b>Net Sales</b>	<b>1,57,885</b>	<b>2,05,504</b>	<b>1,86,094</b>	<b>1,23,864</b>	<b>2,08,568</b>	<b>2,65,428</b>	<b>2,76,591</b>	<b>3,12,721</b>
Change (%)	52.6	30.2	-9.4	-33.4	68.4	27.3	4.2	13.1
Total Expenditure	1,27,083	1,64,793	1,62,989	1,08,220	1,76,407	2,30,714	2,40,915	2,77,345
<b>EBITDA</b>	<b>30,802</b>	<b>40,712</b>	<b>23,105</b>	<b>15,643</b>	<b>32,162</b>	<b>34,714</b>	<b>35,676</b>	<b>35,376</b>
Change (%)	42.9	32.2	-43.2	-32.3	105.6	7.9	2.8	-0.8
Margin (%)	19.5	19.8	12.4	12.6	15.4	13.1	12.9	11.3
Depreciation	6,277	7,604	8,468	8,282	9,140	10,735	11,768	15,466
<b>EBIT</b>	<b>24,525</b>	<b>33,108</b>	<b>14,638</b>	<b>7,362</b>	<b>23,022</b>	<b>23,979</b>	<b>23,908</b>	<b>19,909</b>
Int. and Finance Charges	1,281	1,991	3,039	2,360	2,472	3,542	4,717	6,597
Other Income - Rec.	4,614	5,680	5,255	5,137	8,953	9,979	9,413	9,529
<b>PBT and EO Items</b>	<b>27,858</b>	<b>36,797</b>	<b>16,854</b>	<b>10,139</b>	<b>29,503</b>	<b>30,416</b>	<b>28,604</b>	<b>22,842</b>
Change (%)	31.1	32.1	-54.2	-39.8	191.0	3.1	-6.0	-20.1
Extra Ordinary (income)/expense	2,726	23,680	2,941	810	691	880	0	0
<b>PBT but after EO Items</b>	<b>25,131</b>	<b>13,117</b>	<b>13,913</b>	<b>9,329</b>	<b>28,812</b>	<b>29,536</b>	<b>28,604</b>	<b>22,842</b>
Tax	7,445	7,964	1,214	1,224	1,857	7,300	6,865	5,025
Tax Rate (%)	26.7	21.6	7.2	12.1	6.3	24.0	24.0	22.0
<b>Reported PAT</b>	<b>17,687</b>	<b>5,153</b>	<b>12,700</b>	<b>8,105</b>	<b>26,955</b>	<b>23,200</b>	<b>21,739</b>	<b>17,817</b>
<b>PAT Adj. for EO items</b>	<b>19,684</b>	<b>23,708</b>	<b>15,640</b>	<b>8,914</b>	<b>22,306</b>	<b>22,896</b>	<b>21,739</b>	<b>17,817</b>
Change (%)	26.2	20.4	-34.0	-43.0	150.2	2.6	-5.1	-18.0
Margin (%)	12.5	11.5	8.4	7.2	10.7	8.6	7.9	5.7

### Standalone Balance Sheet

	(INR m)							
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
Equity Share Capital	1,315	1,315	1,316	1,316	1,317	1,317	1,317	1,317
Employee Stock options outstanding			527	567	708	708	708	708
Reserves	4,46,584	4,18,277	3,74,898	4,27,595	4,84,133	5,01,762	5,17,905	5,29,138
<b>Net Worth</b>	<b>4,47,898</b>	<b>4,19,592</b>	<b>3,76,740</b>	<b>4,29,479</b>	<b>4,86,158</b>	<b>5,03,787</b>	<b>5,19,930</b>	<b>5,31,163</b>
Loans	29,690	33,108	50,681	41,634	41,208	78,461	1,06,461	1,25,461
Deferred liabilities	18,350	18,789	14,025	17,339	18,414	18,414	18,414	18,414
<b>Capital Employed</b>	<b>4,95,938</b>	<b>4,71,488</b>	<b>4,41,447</b>	<b>4,88,452</b>	<b>5,45,779</b>	<b>6,00,662</b>	<b>6,44,805</b>	<b>6,75,038</b>
Gross Block	1,27,290	1,38,489	1,54,142	1,48,940	1,95,985	2,33,412	2,56,912	3,61,746
Less: Accum. Deprn.	19,125	26,166	33,310	39,302	47,435	58,170	69,938	85,404
<b>Net Fixed Assets</b>	<b>1,08,166</b>	<b>1,12,322</b>	<b>1,20,832</b>	<b>1,09,637</b>	<b>1,48,549</b>	<b>1,75,242</b>	<b>1,86,974</b>	<b>2,76,341</b>
Capital WIP	7,451	15,672	27,919	40,334	17,428	43,333	67,000	4,000
Non-Current Investments/Strategic	3,35,867	2,81,616	2,56,621	3,05,230	3,39,418	3,39,418	3,39,418	3,39,418
Current - Financial	20,790	29,931	20,504	41,553	47,490	47,490	47,490	47,490
<b>Curr. Assets</b>	<b>65,015</b>	<b>78,398</b>	<b>69,070</b>	<b>46,827</b>	<b>73,477</b>	<b>76,595</b>	<b>84,660</b>	<b>93,136</b>
Inventory	25,917	29,317	26,262	21,790	39,408	40,257	44,549	48,437
Account Receivables	26,093	34,916	29,053	13,120	16,904	18,181	20,790	22,604
Cash and Bank Balance	419	425	789	1,327	2,253	2,231	2,726	3,332
Others	12,586	13,741	12,965	10,590	14,912	15,926	16,595	18,763
<b>Curr. Liability and Prov.</b>	<b>41,351</b>	<b>46,452</b>	<b>53,499</b>	<b>55,130</b>	<b>80,583</b>	<b>81,416</b>	<b>80,737</b>	<b>85,347</b>
Account Payables	21,705	23,757	26,648	27,069	46,507	45,452	44,549	48,437
Provisions	5,087	4,604	5,514	3,250	3,419	5,309	5,532	6,254
Other Liabilities	14,559	18,091	21,337	24,811	30,656	30,656	30,656	30,656
<b>Net Current Assets</b>	<b>23,664</b>	<b>31,947</b>	<b>15,571</b>	<b>-8,303</b>	<b>-7,105</b>	<b>-4,821</b>	<b>3,923</b>	<b>7,789</b>
<b>Appl. of Funds</b>	<b>4,95,938</b>	<b>4,71,488</b>	<b>4,41,447</b>	<b>4,88,452</b>	<b>5,45,779</b>	<b>6,00,662</b>	<b>6,44,805</b>	<b>6,75,038</b>

## Financials and valuations

Standalone ratios									(INR m)
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E	
<b>Share price</b>									
EPS	<b>29.9</b>	<b>36.0</b>	<b>23.8</b>	<b>13.5</b>	<b>33.9</b>	<b>34.8</b>	<b>33.0</b>	<b>27.1</b>	
Cash EPS	39.5	47.6	36.6	26.1	47.8	51.1	50.9	50.6	
BV/Share	681.3	638.0	572.7	652.6	738.4	765.2	789.7	806.8	
DPS	6.2	6.2	7.0	9.0	10.0	8.0	8.5	10.0	
<b>Valuation</b>									
P/E ratio	53.3	44.3	67.1	117.8	47.1	45.9	48.3	58.9	
Cash P/E ratio	40.4	33.5	43.5	61.1	33.4	31.2	31.3	31.6	
P/BV ratio	2.3	2.5	2.8	2.4	2.2	2.1	2.0	2.0	
EV/Sales ratio	0.8	0.6	0.8	1.0	0.5	0.6	0.6	0.6	
EV/EBITDA ratio	4.1	3.0	6.4	7.5	3.3	4.1	4.6	4.4	
Dividend Yield (%)	0.4	0.4	0.4	0.6	0.6	0.5	0.5	0.6	
<b>Return Ratios (%)</b>									
RoE	17.4	17.1	10.4	5.0	11.5	9.8	8.5	5.7	
RoCE	20.5	20.8	9.4	5.3	12.9	11.3	9.3	7.0	
<b>Working Capital Ratios</b>									
Debtor (Days)	73	70	54	31	37	28	28	28	
Asset Turnover (x)	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.5	
<b>Leverage Ratio</b>									
Debt/Equity ratio	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	

Standalone Cash Flow Statement									(INR m)
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E	
OP/(Loss) before Tax	27,858	36,797	12,916	9,329	28,812	30,416	28,604	22,842	
Depreciation	6,277	7,604	8,135	8,282	9,140	10,735	11,768	15,466	
Interest and Finance Charges	-1,540	-1,435	-249	-421	-4,552	-4,055	-2,327	-524	
Direct Taxes Paid	-5,233	-5,123	-2,183	-1,786	-6,502	-7,520	-6,865	-5,025	
(Inc.)/Dec. in WC	-2,797	-10,735	12,611	9,350	132	-2,306	-8,250	-3,259	
<b>CF from Operations</b>	<b>24,564</b>	<b>27,108</b>	<b>31,231</b>	<b>24,754</b>	<b>27,029</b>	<b>27,270</b>	<b>22,930</b>	<b>29,499</b>	
Others	-1,009	-1,553	1,919	-780	-467	0	0	0	
<b>CF from Operations incl. EO</b>	<b>23,555</b>	<b>25,555</b>	<b>33,150</b>	<b>23,974</b>	<b>26,562</b>	<b>27,270</b>	<b>22,930</b>	<b>29,499</b>	
(Inc.)/Dec. in FA	-10,689	-20,440	-26,823	-11,932	-25,382	-63,333	-47,167	-41,833	
<b>Free Cash Flow</b>	<b>12,867</b>	<b>5,115</b>	<b>6,328</b>	<b>12,041</b>	<b>1,181</b>	<b>-36,064</b>	<b>-24,237</b>	<b>-12,334</b>	
(Pur.)/Sale of Investments	167	56	127	102	66	0	0	0	
Others	-8,726	-2,247	-17,904	-10,249	-9,541	7,597	7,044	7,121	
<b>CF from Investments</b>	<b>-19,247</b>	<b>-22,631</b>	<b>-44,600</b>	<b>-22,079</b>	<b>-34,857</b>	<b>-55,736</b>	<b>-40,123</b>	<b>-34,712</b>	
Issue of Shares	23	86	90	126	-425	0	0	0	
Inc.-(Dec.) in Debt	942	3,504	17,127	-9,384	-583	37,253	28,000	19,000	
Interest Paid	-1,417	-2,050	-2,130	-3,241	-843	-3,542	-4,717	-6,597	
Dividend Paid	-4,060	-4,530	-5,155	-2,622	-5,915	-5,267	-5,596	-6,584	
Others	0	0	0	0	0	0	0	0	
<b>CF from Fin. Activity</b>	<b>-4,512</b>	<b>-2,990</b>	<b>9,932</b>	<b>-15,120</b>	<b>-7,766</b>	<b>28,444</b>	<b>17,687</b>	<b>5,820</b>	
<b>Inc./Dec. in Cash</b>	<b>-204</b>	<b>-65</b>	<b>-1,517</b>	<b>-13,226</b>	<b>-16,061</b>	<b>-22</b>	<b>494</b>	<b>607</b>	
Opening Balance	346	261	195	510	692	2,253	2,231	2,726	
Add: Cash on amalgamation	119	0	1,832	13,408	15,895	0	0	0	
<b>Closing Balance</b>	<b>261</b>	<b>196</b>	<b>510</b>	<b>692</b>	<b>527</b>	<b>2,231</b>	<b>2,726</b>	<b>3,332</b>	

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 CCR 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://onlinereports.motilaloswal.com/Dormant/documents/ListOf%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 alterations 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.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022-3980 4263; [www.motilaloswal.com](http://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](mailto:na@motilaloswal.com), Contact No.:022-40548085.

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL: IN-DP-16-2015; NSDL: IN-DP-NSDL-152-2000; 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](mailto: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](mailto:grievances@motilaloswal.com), for DP to [dp@motilaloswal.com](mailto:dp@motilaloswal.com).