

The Ramco Cements

Estimate change	1
TP change	1
Rating change	←→

Bloomberg	TRCL IN
Equity Shares (m)	236
M.Cap.(INRb)/(USDb)	199.3 / 2.4
52-Week Range (INR)	849 / 575
1, 6, 12 Rel. Per (%)	10/30/7
12M Avg Val (INR M)	350

Financial Snapshot (INR b)

Tillaliciai Shapshot (IIIII D		
Y/E Mar	FY23	FY24E	FY25E
Sales	81.4	93.5	101.0
EBITDA	11.8	15.5	19.3
Adj. PAT	3.4	5.1	7.7
EBITDA Margin (%)	14.5	16.6	19.1
Adj. EPS (INR)	14.5	21.7	32.4
EPS Gr. (%)	-41.8	49.6	49.0
BV/Sh. (INR)	287	306	335
Ratios			
Net D:E	0.6	0.6	0.5
RoE (%)	5.2	7.3	10.1
RoCE (%)	4.8	6.2	8.0
Payout (%)	13.8	16.1	10.8
Valuations			
P/E (x)	58.0	38.8	26.0
P/BV (x)	2.9	2.8	2.5
EV/EBITDA(x)	18.8	15.3	12.0
EV/ton (USD)	131	130	127
Div. Yield (%)	0.2	0.4	0.4
FCF Yield (%)	-1.9	2.4	4.5

Shareholding pattern (%)

As On	Mar-23	Dec-22	Mar-22
Promoter	42.3	42.3	42.3
DII	35.9	35.6	36.0
FII	7.6	7.1	7.6
Others	14.3	14.9	14.0

FII Includes depository receipts

CMP: INR843 TP: INR885 (+5%) Neutral Strong performance driven by higher volume and cost control Volume growth to be at 20% YoY in FY24E

- The Ramco Cements (TRCL)'s 4QFY23 performance was above our estimates driven by higher volume and better cost control measures. EBITDA stood at INR4.1b (v/s est. INR3.0b), while blended EBITDA/t was at INR878 (v/s est. INR706). Net profit came in at INR1.5b (v/s est. INR690m) during the quarter.
- Management expects margin improvement from 2QFY24 due to reduction in fuel prices (spot petcoke price is at USD135/t v/s USD178/t in 4QFY23). Kurnool, AP expansion (Line II) will be prioritized over Karnataka Greenfield expansion, as land acquisition in Karnataka will take time while infrastructure is ready in Kurnool.
- We raise our EPS by 2%/6% for FY24E/FY25E. The stock trades at 15.3x FY24E EV/EBITDA. It has traded at an average EV/EBITDA of 15.5x/14.0x in the last 5/10 years. We maintain our Neutral rating with a revised TP of INR885, based on 12.5x FY25E EV/EBITDA (earlier Sep'24E EV/EBITDA).

EBITDA up 40% YoY; EBITDA/t at INR878

- TRCL's revenue/EBITDA/PAT stood at INR25.7b/INR4.1b/INR1.5b (up 50%/ 40%/24% YoY and 13%/40%/121% above our estimate). Sales volume (incl. dry-mortar) grew 46% YoY (13% above estimate). Realization improved 3% YoY (1% above estimate) in 4QFY23.
- OPEX/t rose 5% YoY, led by a 21% rise in variable cost. However, Freight/ Other expenses/Employee cost per tonne declined 2%/28%/18%/ YoY. EBITDA/t declined 4% YoY and OPM was down 1.2pp YoY. Other income rose 17% YoY while finance cost increased 131% YoY during the quarter.
- In FY23, revenue jumped 36% YoY, primarily led by volumes (35% growth). Cost pressures (OPEX/t up 10% YoY) led to an 8% YoY decline in EBITDA to INR11.8b. OPM contracted 7pp YoY to 14.5% and EBITDA/t declined 32% YoY to INR787. Adjusted PAT was down 42% YoY to INR3.4b.

Highlights from the management commentary

- Demand improved in IHB segment; while infra demand is likely to remain resilient supported by pre-election demand and likely normal monsoon.
 Cement price was weak in the South whereas it improved in the East.
- Fuel cost per kcal stood at INR2.2 (v/s INR2.4 in 3QFY23). Besides, TRCL changed 19% of the wind power capacity under 'Sale to grid' to 'Captive Use' and plans to convert the entire capacity for captive usage in FY24.
- Orissa GU Line-2, having capacity of 0.9mt, is estimated to be commissioned in 3QFY24. The company will decide on its next leg of expansion in a few quarters; however; Kurnool Line-II will be prioritized over Karnataka plant.

Balance sheet deleveraging needed; reiterate Neutral

- TRCL's net debt has declined INR2.7b QoQ to INR43b as of Mar'23. It expects INR1b release from working capital with decline in fuel prices. We estimate FY24 net debt at INR41.5b and net debt/EBITDA at 2.7x.
- At CMP, the stock trades at 15.3x/12.0x FY24E/FY25E EV/EBITDA. We value TRCL at 12.5x FY25E EV/EBITDA (earlier Sep'24E EV/EBITDA) and reiterate our Neutral rating with a revised TP of INR885.

Sanjeev Kumar Singh - Research analyst (Sanjeev.Singh@MotilalOswal.com)

Mudit Agarwal - Research analyst (Mudit.Agarwal@MotilalOswal.com)

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

 $Motilal\ Oswal$

Quarterly Performance		E)//2				EV/2	•		E)/22	EVOO	EV/22	(INR b)
Y/E March		FY2				FY2			FY22	FY23	FY23	Var.
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			4QE	(%)
Sales Dispatches (m ton)	2.14	2.71	3.01	3.23	3.31	3.31	3.57	4.70	11.14	15.02	4.17	13
YoY Change (%)	10.4	22.6	15.0	0.6	54.6	22.1	18.7	45.5	11.7	34.8	30.7	
Realization (INR/ton)	5,648	5,386	5,138	5,283	5,298	5,312	5,623	5,464	5,315	5,384	5,425	1
YoY Change (%)	6.9	(3.1)	0.9	4.2	(6.2)	(1.4)	9.4	3.4	1.7	1.3	1.5	
QoQ Change (%)	11.4	(4.6)	(4.6)	2.8	0.3	0.3	5.9	(2.8)			(3.5)	
Net Sales	12.3	14.9	15.5	17.1	17.7	17.8	20.1	25.7	59.8	81.4	22.6	13
YoY Change (%)	17.9	18.8	15.7	4.8	44.3	19.5	29.7	50.3	13.5	36.0	32.5	
Total Expenditure	8.6	11.0	13.2	14.1	14.7	16.0	17.2	21.6	47.0	69.5	19.7	9
EBITDA	3.6	3.9	2.3	3.0	3.0	1.8	2.8	4.1	12.8	11.8	2.9	40
Margins (%)	29.6	26.4	14.9	17.3	17.0	10.3	14.2	16.1	21.5	14.5	13.0	
Depreciation	1.0	1.0	1.0	1.1	1.1	1.2	1.4	1.4	4.0	5.0	1.4	2
Interest	0.2	0.3	0.3	0.3	0.5	0.6	0.6	0.8	1.1	2.4	0.7	15
Other Income	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.1	22
PBT before EO expense	2.5	2.7	1.1	1.6	1.5	0.2	1.0	2.1	8.0	4.7	1.0	108
PBT	2.5	2.7	1.1	1.6	1.5	0.2	1.0	2.1	8.0	4.7	1.0	108
Tax	0.8	0.6	0.3	0.4	0.4	0.0	0.3	0.5	2.2	1.3	0.3	
Prior year tax	-	(3.1)	-	(0.0)	-	-	-	-	(3.1)	-	-	
Rate (%)	32.4	22.8	27.1	24.9	27.0	28.4	30.7	26.3	26.8	27.5	30.6	
Reported PAT	1.7	5.2	0.8	1.2	1.1	0.1	0.7	1.5	8.9	3.4	0.7	121
Adj PAT	1.7	2.2	0.8	1.2	1.1	0.1	0.7	1.5	5.9	3.4	0.7	121
YoY Change (%)	54.2	(8.7)	(59.0)	(42.5)	(33.6)	(94.7)	(18.4)	23.7	(22.5)	(41.8)	(44.0)	
Margins (%)	13.8	14.4	5.3	7.2	6.3	0.6	3.4	5.9	9.9	4.2	3.0	

Per ton analysis (incl. Windmills) (INR/t										(INR/t)		
Net realization	5,739	5,510	5,152	5,291	5,355	5,391	5,627	5,467	5,368	5,416	5,428	1
RM Cost	696	790	857	835	798	815	779	1,130	799	894	800	41
Employee Expenses	490	404	351	292	327	339	316	241	410	306	269	(11)
Power, Oil & Fuel	1,031	1,056	1,380	1,445	1,584	2,013	1,967	1,635	1,247	1,772	1,867	(12)
Freight and Handling Outward	1,073	1,108	1,111	1,084	1,087	1,052	1,109	1,063	1,090	1,067	1,120	(5)
Other Expenses	748	698	684	721	650	617	659	521	670	590	665	(22)
Total Expenses	4,039	4,056	4,384	4,378	4,447	4,835	4,829	4,589	4,216	4,629	4,722	(3)
EBITDA	1,700	1,453	768	914	908	555	797	878	1,152	787	706	24
Cement EBITDA (excl. Windmills)	1,636	1,350	774	921	867	492	808	886	1,119	769	718	23

Source: Company, MOFSL Estimates

MOTILAL OSWAL



Highlights from the management commentary

Demand and pricing

- In the Southern region, demand has improved in both trade and non-trade (mainly in road projects) sectors. However, in the Eastern region trade demand remained flat, while it increased in the non-trade segment.
- The target volume growth in FY24 is ~20% after achieving ~35% YoY growth in FY23. IHB demand is healthy, while infrastructure demand is estimated to be resilient supported by expectation of good monsoon; increased allocation towards infrastructure and PMAY in Union Budget 2023.

Operational highlights

- Capacity utilization stood at 85%/73% in 4QFY23/FY23 v/s 66%/57% in 4QFY22/FY22. The capacity utilization of clinker plant at Kurnool, AP stood at 83% in 4QFY23 v/s ~55% in 3QFY23.
- OPC sales were at 30% of total volumes v/s 29% in FY22. While, the share of non-trade sales increased to 34% from 29% in FY22.
- The company continues to focus on the strategy of right products for right applications to make its brands stronger. Its premium products share rose 3pp YoY to 25% in FY23 and stood at 28%/16% in South and East regions.
- Lead distance was at 310kms v/s 326Kms/299km in 4QFY22/3QFY23. Rail: Road mix was at 12%:88% v/s 15%:85% in 4QFY22 and 10%:90% in 3QFY23. In FY23, average lead distance declined 8% YoY to 298Kms. Rail: Road mix was at 11%:89% v/s 13%:87% in FY22. Resumption of busy season surcharge by Indian Railways led to a cost increase of ~INR50/t in 2HFY23.
- Blended fuel consumption cost stood at USD178/t v/s USD191/t in 3QFY23 and USD177/t in FY23 v/s USD125/t in FY22. It used 56% petcoke (v/s 52% in 4QFY22 and 59% in 3QFY23), 31% coal (v/s 33% in 4QFY22 and 32% in 3QFY23) and 13% alternate fuel (v/s 15% in 4QFY22 and 9% in 3QFY23). Blended fuel cost per Kcal was at INR2.21 v/s INR1.88/INR2.43 in 4QFY22/3QFY23.
- Clinker/cement production stood at 11.87mtpa/14.86mtpa in FY23, which implies C:C ratio of 1.25x.
- Green energy contributed 23% of power requirements v/s 16%/20% in 4QFY22/3QFY23, respectively. The company increased captive use of wind power capacity to 33MW in FY23 from 17MW in FY22, which helped increase overall green power share in total power consumption. It targets to increase green energy share to 34% by FY24.
- In FY23, power generation from the wind plant was down 4% YoY. Revenue was down 19% YoY at INR595m, mainly due to 19% of the wind power capacity under sale to grid was changed to captive use. EBITDA declined 27% YoY to INR272m in FY23.

Capex and project update

- Grinding capacity expansion at Haridaspur, Odisha (by 0.9mtpa to 1.8mtpa) is expected to be commissioned in 3QFY24.
- The company commissioned RR Nagar line-III with clinker capacity of 1.04mtpa and cement capacity of 1mtpa in Mar'23. Given the strong demand, the company would continue to operate older kiln at RR Nagar.

WHRS capacity of 8MW in Kurnool was commissioned in FY23 and the balance 4MW will be commissioned in May'23. Thermal power plant of 18MW and railway siding at this plant will be commissioned in FY24.

- The company has commissioned one dry-mix mortar plant in Tamil Nadu in Dec'22 and another plant in Feb'23. The other two units in Andhra Pradesh and Odisha are likely to be completed in FY24E.
- In 4QFY23, TRCL's capex stood at INR3.85b (v/s INR17.65b in FY23). Capex of FY23 included INR6b for Kurnool, AP and INR5b for RR Nagar, TN. It maintains a capex guidance of INR8.5b for FY24E. It will prioritize Line-2 expansion at Kurnool, Andhra Pradesh with a clinker capacity of 2.25mtpa and grinding capacity of 2-3mtpa over Karnataka Greenfield expansion. Land acquisition approval for the Karnataka unit has been obtained.

Debt and other highlights

- Net debt declined INR2.7b QoQ to INR43b. It expects INR1b working capital release in FY24 due to decline in fuel prices.
- Dry mortar volume was 0.07m/0.2m in 4QFY23/FY23.

Story in charts

Exhibit 1: Sales volume grew 46% YoY and 32% QoQ

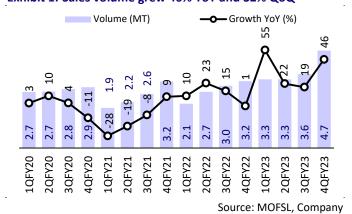


Exhibit 2: Cement realization up 3% YoY; but down 3% QoQ



Source: MOFSL, Company

Exhibit 3: Opex/t increased 5% YoY; declined 5% QoQ

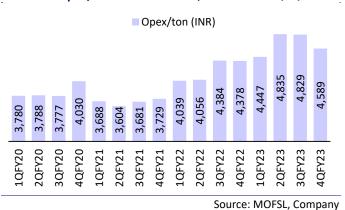


Exhibit 4: Blended EBITDA/t declined 4% YoY

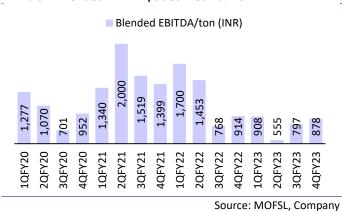
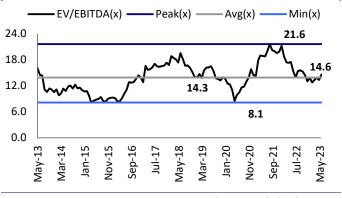


Exhibit 5: Key Performance Indicators – per ton analysis

INR/t **4QFY23** 4QFY22 YoY (%) **3QFY23** QoQ (%) Net realization 5,291 5,627 5,467 3.3 (2.8)**RM Cost** 1,130 835 35.2 779 45.0 **Employee Expenses** 241 292 (17.6)316 (23.9)Power, Oil & Fuel 1,635 1,445 1,967 (16.9)13.2 Freight and Handling Outward 1,063 1,084 (2.0)1,109 (4.2)Other Expenses 521 721 (27.8)659 (20.9)**Total Expenses** 4,589 4,378 4,829 (5.0)4.8 **EBITDA** (3.9)10.2 878 914 797 Cement EBITDA (ex-Windmills) 886 921 808 (3.8)9.7

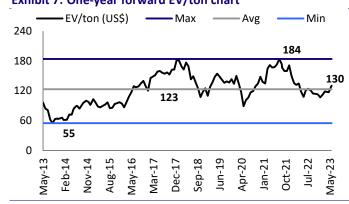
Source: MOFSL, Company

Exhibit 6: One-year forward EV/EBITDA chart



Source: MOFSL, Company

Exhibit 7: One-year forward EV/ton chart



Source: MOFSL, Company

 $Motilal\ Oswal$

Financials and valuations

Income Statement								(INR m)
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
Net Sales	43,851	51,220	53,435	52,684	59,800	81,353	93,542	1,01,008
Change (%)	11.6	16.8	4.3	-1.4	13.5	36.0	15.0	8.0
EBITDA	10,658	10,123	11,117	15,480	12,838	11,820	15,544	19,335
Margin (%)	24.3	19.8	20.8	29.4	21.5	14.5	16.6	19.1
Depreciation	2,922	2,985	3,153	3,553	4,008	5,044	6,090	6,715
EBIT	7,736	7,138	7,964	11,927	8,830	6,775	9,454	12,621
Int. and Finance Charges	592	509	714	876	1,124	2,405	2,662	2,344
Other Income - Rec.	579	527	622	346	306	367	346	356
PBT bef. EO Exp.	7,723	7,156	7,872	11,397	8,012	4,737	7,138	10,633
EO Expense/(Income)	87	30	0	0	0	0	0	0
PBT after EO Exp.	7,636	7,126	7,872	11,397	8,012	4,737	7,138	10,633
Current Tax	1,859	1,846	1,393	2,440	1,768	257	1,999	2,977
Deferred Tax	220	221	469	1,346	-2,682	1,045	0	0
Tax Rate (%)	27.2	29.0	23.6	33.2	-11.4	27.5	28.0	28.0
Reported PAT	5,557	5,059	6,011	7,611	8,927	3,435	5,139	7,655
PAT Adj for EO items	5,644	5,089	6,011	7,611	5,899	3,435	5,139	7,655
Change (%)	-12.8	-9.8	18.1	26.6	-22.5	-41.8	49.6	49.0
Margin (%)	12.9	9.9	11.2	14.4	9.9	4.2	5.5	7.6
Balance Sheet								(INR m)
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
Equity Share Capital	236	236	236	236	236	236	236	236
Total Reserves	40,186	44,366	48,950	56,032	65,012	67,699	72,011	78,840
Net Worth	40,422	44,601	49,186	56,268	65,249	67,935	72,248	79,076
Deferred Liabilities	7,597	8,704	9,172	10,877	8,240	9,285	9,285	9,285
Total Loans	11,132	16,187	30,241	31,017	39,300	44,874	43,874	38,374
Capital Employed	59,150	69,493	88,599	98,162	1,12,789	1,22,095	1,25,407	1,26,735
Gross Block	81,976	84,945	93,901	1,06,223	1,18,037	1,47,329	1,73,203	1,80,203
Less: Accum. Deprn.	31,121	33,514	35,757	38,720	42,728	47,772	53,862	60,577
Net Fixed Assets	50,854	51,431	58,144	67,503	75,309	99,557	1,19,340	1,19,626
Capital WIP	1,500	8,308	18,143	23,255	30,340	19,873	3,000	3,000
Total Investments	3,968	4,294	4,275	4,369	4,220	4,209	4,209	4,209
Curr. Assets, Loans&Adv.	14,581	17,049	19,908	18,331	20,687	21,530	24,089	26,124
Inventory	5,599	5,597	6,453	5,979	8,333	8,823	10,251	11,069
Account Receivables	4,423	4,900	5,269	3,752	3,498	4,650	5,382	5,811
Cash and Bank Balance	1,194	928	914	1,419	1,760	1,686	2,048	2,325
Loans and Advances	3,365	5,625	7,273	7,181	7,095	6,371	6,407	6,918
Curr. Liability & Prov.	11,754	11,589	11,871	15,296	17,767	23,074	25,230	26,222
Account Payables	11,183	11,179	11,341	14,655	16,985	22,141	24,347	24,906
Provisions	571	410	531	641	782	933	884	1,316
Net Current Assets	2,827	5,461	8,037	3,035	2,920	-1,545	-1,142	-99

Source: Company, MOFSL Estimates

59,150

69,493

88,599

98,162

1,12,789

1,22,095

1,25,407

1,26,735

Appl. of Funds

Financials and valuations

Ratios								
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
Basic (INR)								
EPS	24.0	21.6	25.5	32.3	25.0	14.5	21.7	32.4
Cash EPS	36.4	34.3	38.9	47.3	41.9	35.9	47.5	60.8
BV/Share	171.6	189.3	208.8	238.5	276.1	287.5	305.7	334.6
DPS	3.0	3.0	2.5	3.0	3.0	2.0	3.5	3.5
Payout (%)	12.7	16.8	11.8	9.3	7.9	13.8	16.1	10.8
Valuation (x)								
P/E	35.2	39.0	33.1	26.1	33.8	58.0	38.8	26.0
Cash P/E	23.2	24.6	21.7	17.8	20.1	23.5	17.7	13.9
P/BV	4.9	4.5	4.0	3.5	3.1	2.9	2.8	2.5
EV/Sales	4.7	4.0	3.9	3.9	3.4	2.7	2.5	2.3
EV/EBITDA	19.4	20.3	18.9	13.2	16.0	18.8	15.3	12.0
EV/Ton (USD)	150	149	135	128	128	131	130	127
Dividend Yield (%)	0.4	0.4	0.3	0.4	0.4	0.2	0.4	0.4
Return Ratios (%)								
RoIC	10.7	9.3	10.0	11.9	13.5	5.7	6.4	7.8
RoE	14.5	12.0	12.8	14.4	9.7	5.2	7.3	10.1
RoCE	11.7	9.7	9.4	9.8	10.6	4.8	6.2	8.0
Working Capital Ratios								
Asset Turnover (x)	0.7	0.7	0.6	0.5	0.5	0.7	0.7	0.8
Inventory (Days)	46.6	39.9	44.1	41.4	50.9	39.6	40.0	40.0
Debtor (Days)	35.5	34.9	36.0	26.0	21.3	20.9	21.0	21.0
Creditor (Days)	93.1	79.7	77.5	101.5	103.7	99.3	95.0	90.0
Leverage Ratio (x)								
Current Ratio	1.2	1.5	1.7	1.2	1.2	0.9	1.0	1.0
Debt/Equity	0.3	0.4	0.6	0.6	0.6	0.7	0.6	0.5
Cash Flow Statement								(INR m)
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
OP/(Loss) before Tax	7,847	7,156	7,872	11,397	8,012	4,737	7,138	10,633
Depreciation	2,922	2,985	3,153	3,553	4,008	5,044	6,090	6,715
Interest & Finance Charges	436	404	714	876	1,124	2,405	2,662	2,344
Direct Taxes Paid	-1,713	-1,584	-1,861	-3,786	915	-1,302	-1,999	-2,977
(Inc)/Dec in WC	1,564	-929	-2,590	5,507	457	4,390	-40	-767
CF from Operations	11,055	8,032	7,287	17,547	14,516	15,275	13,852	15,947
Others	74	-127	100	143	30	-166	0	0
CF from Operating incl EO	11,129	7,904	7,387	17,690	14,546	15,109	13,852	15,947
(Inc)/Dec in FA	-4,942	-12,018	-18,791	-17,434	-18,900	-18,826	-9,000	-7,000
Free Cash Flow	6,187	-4,114	-11,404	256	-4,354	-3,717	4,852	8,947
(Pur)/Sale of Investments	0	9	19	-94	150	11	0	0
Others	1,698	-2,588	-1,257	1,150	-1,904	935	0	0
CF from Investments	-3,244	-14,597	-20,029	-16,378	-20,654	-17,880	-9,000	-7,000
Issue of Shares	0	0	0	0	0	0	0	0
Inc/(Dec) in Debt	-4,682	7,755	14,054	776	8,282	5,575	-1,000	-5,500
Interest Paid	-658	-476	-714	-876	-1,124	-2,405	-2,662	-2,344
Dividend Paid	-852	-853	-711	-708	-709	-473	-827	-827
Others	-1,681	0	0	0	0	0	0	0
CF from Fin. Activity	-7,872	6,426	12,630	-808	6,450	2,697	-4,490	-8,671
Inc/Dec of Cash	13	-266	-13	504	342	-74	362	276
Opening Balance	1,181	1,194	927	915	1,419	1,761	1,686	2,048
Closing Balance	1194	927	915	1,419	1,761	1,686	2,048	2,325
				,	,	,	, , , , , ,	,,,,,

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.

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 Motilal Financial Limited available of Oswal Services are http://onlinereports.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 ral.com/ResearchAnalyst/PublishViewLitigation.aspx

A graph of daily closing prices of securities is available at www.nseindia.com, www.nseindia.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 brokerdealer, 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

- 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.
- MOFSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject compar MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- 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
- Research Analyst has not served as director/officer/employee in the subject company
- MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- 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

19 May 2023

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 ansing 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.

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.