

Tata Chemicals

Estimate change	1
TP change	1
Rating change	\leftarrow

Bloomberg	TTCH IN
Equity Shares (m)	255
M.Cap.(INRb)/(USDb)	273.7 / 3.4
52-Week Range (INR)	1158 / 774
1, 6, 12 Rel. Per (%)	21/12/20
12M Avg Val (INR M)	1905

Financials & Valuations (INR b)

Y/E Mar	2022	2023E	2024E
Sales	126.2	164.2	168.7
EBITDA	23.0	35.0	34.0
PAT	12.6	18.9	16.8
EBITDA (%)	18.3	21.3	20.2
EPS (INR)	49.6	74.3	66.0
EPS Gr. (%)	392.9	49.7	(11.2)
BV/Sh. (INR)	716	777	830
Ratios			
Net D/E	0.2	0.2	0.1
RoE (%)	7.8	9.9	8.2
RoCE (%)	6.2	8.4	7.6
Valuations			
P/E (x)	21.7	14.5	16.3
EV/EBITDA (x)	14.2	9.1	8.9
Div Yield (%)	1.2	1.2	1.2
FCF Yield (%)	(2.7)	5.3	7.7

Shareholding pattern (%)

As On	Jun-22	Mar-22	Jun-21
Promoter	38.0	38.0	38.0
DII	19.2	19.9	19.7
FII	15.0	13.6	13.0
Others	27.9	28.5	29.3

CMP: INR1,074 TP: INR1,210 (+13%) Neutral

Robust Soda ash demand drives healthy performance

Operating performance above our expectation across geographies

- Tata Chemicals (TTCH)'s 1QFY23 consolidated EBITDA beat our estimate, with a strong operating performance across geographies backed by robust growth in Soda Ash realization.
- Globally, demand for Soda Ash has been buoyant, with a favorable demand-supply scenario. All plants across the geographies have been running at optimum utilization levels.
- Factoring in the strong operating performance in 1QFY23, we raise our FY23/FY24 EBITDA estimates by 23%/11%, respectively. We maintain our Neutral rating with an SoTP-based TP of INR1,210.

Higher realization aids margin expansion across all geographies

- TTCH reported revenue of INR40b (est. INR40.9b) in 1QFY23, up 34% YoY. EBITDA margin expanded 520bp YoY to 25.4% (est. 18.7%). EBITDA stood at INR10.2b (est. INR7.6b). Adjusted PAT jumped 2.1x YoY to INR5.9b (est. INR3.7b) due to better material margin and lower other and employee expenses as a percentage of sales.
- Basic Chemistry/Specialty Products grew 41%/17% YoY to INR30.6b/ INR9.3b; their EBIT margins expanded/contracted by 910bp/330bp YoY to 25.0%/8.4%, respectively, in 1QFY23.
- India standalone/TCNA/TCEHL/TCAHL revenue rose 48%/34%/30%/84% YoY to INR12.3b/INR11.2b/INR5.3b/INR2.5b, respectively, in 1QFY23. Their EBITDA margins expanded 360/400/1,130/2,970bp to 32.5%/24.7%/ 18.5%/48.4%, respectively, led by improvement in realizations that offset surge in raw material prices and energy costs.
- In North America, Soda Ash realization was higher by 30% to USD255/MT in 1QFY23. EBITDA/MT jumped 55% to USD63/MT led by favorable operating leverage during the quarter.

Highlights from the management commentary

- Capex: TTCH has incurred a capex of INR18b until Jun'22 and the balance INR11b would be spent by Mar'24.
- Market Outlook: Soda Ash price environment is likely to stay robust over the next 18-24 months and the demand-supply dynamics are forecasted to remain favorable until FY25-FY26.
- **Net debt** rose to INR49.8b in Jun'22 v/s INR42.3b as of Mar'22 and INR41.2b in Dec'21. TTCH would continue to pay down debt on books with an aim of achieving debt-free status in TCAHL over the next 12 to 15 months; it will also continue to pay down debt at USD100m per annum in TCNA.

Sumant Kumar - Research Analyst (Sumant.Kumar@MotilalOswal.com)

Valuation and view

- We expect the favorable soda ash demand-supply dynamics to sustain in the medium term aided by emergence of newer applications such as solar glass and lithium Ion batteries. However, on a one-year forward basis, TTCH is trading at an average EV/EBITDA of 8.8x, which is at par with its last 10-year average.
- We expect a revenue/EBITDA/PAT CAGR of 16%/21%/15% over FY22-24, respectively.
- Factoring in the strong operating performance in 1QFY23, we raise our FY23/ FY24 EBITDA estimates by 23%/11%, respectively. We maintain our Neutral rating with an SoTP-based TP of INR1,210.

Consoli	dated -	Quarterly	/ Farning	Model
COHSON	uateu -	Quartern	/ Callillig	ivioue

Y/E March		FY22	2			FY23	3		FY22	FY23E	FY23E	Var
	1Q	2Q	3Q	4Q	1Q	2QE	3QE	4QE			1Q	%
Net Sales	29.8	30.2	31.4	34.8	40.0	42.9	41.2	40.2	126.2	164.2	40.8	-2
YoY Change (%)									23.8	30.1	37.2	
Total Expenditure	23.8	25.2	26.0	28.2	29.8	33.6	33.0	32.9	103.2	129.3	33.2	
EBITDA	6.0	5.0	5.5	6.6	10.2	9.3	8.2	7.3	23.0	35.0	7.6	33
Margins (%)	20.2	16.6	17.4	18.9	25.4	21.7	19.8	18.3	18.3	21.3	18.7	
Depreciation	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	8.1	8.6	2.1	
Interest	0.8	0.8	0.7	0.7	0.8	8.0	0.8	0.8	3.0	3.2	0.7	
Other Income	0.5	0.6	0.4	1.1	0.5	0.6	0.4	0.5	2.6	1.9	0.6	
PBT before EO expense	3.8	2.7	3.1	4.9	7.7	6.9	5.6	4.9	14.5	25.1	5.4	
Extra-Ord expense	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.4	0.0	0.0	
PBT	3.8	2.6	3.1	4.6	7.6	6.9	5.6	4.9	14.2	25.1	5.4	
Tax	0.9	0.7	0.7	0.4	1.6	1.7	1.4	1.2	2.7	5.8	1.3	
Rate (%)	22.8	27.5	21.2	9.3	20.4	24.5	24.5	24.5	18.9	23.3	24.5	
MI & Profit/Loss of Asso. Cos.	0.0	-0.1	-0.5	-0.2	0.2	0.2	0.0	0.0	-0.8	0.3	0.4	
Reported PAT	2.9	2.0	3.0	4.4	5.9	5.0	4.3	3.7	12.3	18.9	3.7	
Adj PAT	2.9	2.1	3.0	4.6	5.9	5.0	4.3	3.7	12.6	18.9	3.7	60
YoY Change (%)									392.9	49.7	28.7	
Margins (%)	9.7	7.0	9.6	13.3	14.8	11.7	10.3	9.3	10.0	11.5	9.1	

Key Performance Indicators

Y/E March		FY22	2			FY23			FY22 FY	
Consolidated	1Q	2Q	3Q	4Q	1Q	2QE	3QE	4QE		
Sales Volume (000'MT)										
North America	578	613	586	615	568	613	598	621	2,392	2,400
Europe	191	175	188	192	181	183	195	197	746	756
Africa	83	86	73	75	83	87	87	87	317	344
EBITDA/MT										
North America (USD)	40.6	43.3	32.9	60.2	63.0	60.0	58.0	55.0	44.4	58.9
Europe (GBP)	14.7	-10.0	34.4	20.9	51.1	30.0	25.0	25.0	15.5	32.5
Africa (USD)	40.9	51.9	46.1	107.7	186.0	120.0	110.0	100.0	60.9	128.3
Cost Break-up										
RM Cost (% of sales)	21.9	22.9	18.9	20.1	19.9	23.5	23.5	23.5	20.9	22.6
Staff Cost (% of sales)	12.6	12.4	12.5	11.4	10.2	9.7	10.2	10.7	12.2	10.2
Power and Fuel Cost (% of sales)	13.4	16.2	18.4	18.6	15.5	16.0	16.7	17.0	16.7	16.3
Freight and Distribution Cost (% of sales)	14.2	14.5	14.0	14.5	12.9	12.8	13.3	13.5	14.3	13.1
Other Cost (% of sales)	17.8	17.4	18.9	16.5	16.1	16.3	16.5	17.0	17.6	16.5
Gross Margins (%)	78.1	77.1	81.1	79.9	80.1	76.5	76.5	76.5	79.1	77.4
EBITDA Margins (%)	20.2	16.6	17.4	18.9	25.4	21.7	19.8	18.3	18.3	21.3
EBIT Margins (%)	13.6	10.0	10.9	13.0	20.1	16.7	14.6	12.9	11.9	16.1

Key exhibits

Exhibit 1: Consolidated revenue trend

-1%

-6%

26,094

-9% 0

23,482

Revenue (INRm)

11%

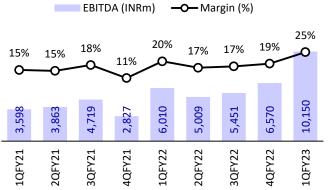
27%

29,780

—O—Growth (%) 34% 0 39,950

1QFY23

Exhibit 2: Consolidated EBITDA trend



Source: Company, MOFSL

32%

34,810

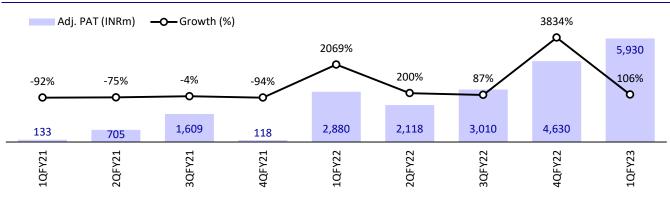
21%

16%

30,226

Source: Company, MOFSL

Exhibit 3: Consolidated adjusted PAT trend



Source: Company, MOFSL

Exhibit 4: Consolidated segmental revenue

INR m	1QFY22	4QFY22	1QFY23	%YoY	% QoQ
Revenue					
Basic Chemistry products	21,740	29,030	30,600	41%	5%
Specialty products	7,970	5,640	9,340	17%	66%
Less: Inter-segment revenue	10	40	50		
Add: Unallocated	80	180	60		
Total revenue	29,780	34,810	39,950	34%	15%

Source: Company, MOFSL

Exhibit 5: Consolidated segmental EBIT

INR m	1QFY22	4QFY22	1QFY23	%YoY	%QoQ
EBIT					
Basic Chemistry products	3,460	5,160	7,650	121%	48%
Margin	15.9%	17.8%	25.0%		
Specialty products	930	-240	780	-16%	-425%
Margin	11.7%	-4.3%	8.4%		
Total EBIT	4,390	4,920	8,430	92%	71%
Less: Finance Cost	810	690	800		
Less: Unallocated (income)/expense	-190	-660	-50		
РВТ	3,770	4,890	7,680	104%	57%
		•	•	•	•

Source: Company, MOFSL

3 10 August 2022

MOTILAL OSWAL

Exhibit 6: Standalone operational performance trend

INR m	1QFY21	2QFY21	3QFY21	4QFY21	1QFY22	2QFY22	3QFY22	4QFY22	1QFY23	%YoY	%QoQ
Soda Ash sales volume ('000MT)	118	151	178	184	167	178	156	176	169	1	-4
Sodium Bicarbonate sales volume ('000MT)	21	25	26	31	28	27	33	29	30	7	3
Salt sales volume ('000MT)	298	295	319	302	312	320	294	325	330	6	2
Realization - Basic Chemistry Products (INR/MT)	14,007	14,363	14,621	15,315	15,168	15,066	17,983	19,736	21,815	44	11
Net sales	6,280	7,170	8,120	8,410	8,280	8,470	9,310	11,150	12,250	48	10
EBITDA	1,560	1,160	1,750	1,640	2,390	1,920	2,440	2,770	3,980	67	44
EBITDA (%)	24.8%	16.2%	21.6%	19.5%	28.9%	22.7%	26.2%	24.8%	32.5%		
PBT	1,423	1,658	1,477	1,582	2,820	1,971	2,136	3,100	4,950	76	60
PAT	1,088	1,351	1,156	1,196	2,280	1,346	1,557	2,680	3,810	67	42

Source: Company, MOFSL

Exhibit 7: Performance trend in its North American operations

INR m	1QFY21	2QFY21	3QFY21	4QFY21	1QFY22	2QFY22	3QFY22	4QFY22	1QFY23	%YoY	%QoQ
Soda Ash utilization (%)	60%	72%	79%	87%	91%	97%	92%	96%	92%		
Sales volume ('000MT)	387	475	474	566	578	613	586	615	568	-2	-8
Realization (INR/MT)	15,995	14,968	15,654	14,258	14,481	14,144	15,205	17,756	19,701	36	11
Realization (USD/MT)	211	199	210	192	196	191	205	239	256	30	7
EBITDA/MT (USD)	12	27	45	15	41	43	33	60	63	55	5
Net sales	6,190	7,110	7,420	8,070	8,370	8,670	8,910	10,920	11,190	34	2
EBITDA	350	960	1,580	630	1,730	1,960	1,430	2,750	2,760	60	0
EBITDA (%)	5.7%	13.5%	21.3%	7.8%	20.7%	22.6%	16.0%	25.2%	24.7%		
PBT	-1,190	-260	350	-600	550	760	370	1,710	1,590	189	-7
PAT	-1,070	-440	190	-520	510	660	250	1,740	1,410	176	-19

Source: Company, MOFSL

Exhibit 8: Performance trend in its Europe operations

INR m	1QFY21	2QFY21	3QFY21	4QFY21	1QFY22	2QFY22	3QFY22	4QFY22	1QFY23	%YoY	%QoQ
Soda Ash volume ('000MT)	62	67	70	67	68	68	71	71	65	-4	-8
Sodium Bicarbonate volume ('000MT)	30	27	28	29	27	25	28	30	28	4	-7
Total sales volume ('000MT)	179	181	197	191	191	175	188	192	181	-5	-6
Realization (INR/MT)	17,654	18,619	18,985	20,052	21,309	23,771	29,309	30,000	29,337	38	-2
Realization (GBP/MT)	187	196	198	207	207	232	287	294	277	34	-6
EBITDA/MT (GBP)	17	27	24	10	15	-10	34	21	51	247	144
Net sales	3,160	3,370	3,740	3,830	4,070	4,160	5,510	5,760	5,310	30	-8
EBITDA	280	460	450	190	290	-180	660	410	980	238	139
EBITDA (%)	8.9%	13.6%	12.0%	5.0%	7.1%	-4.3%	12.0%	7.1%	18.5%		
PBT	-160	20	20	-280	-180	-670	130	-120	490	-372	-508
PAT	-160	20	20	-440	-180	-670	130	-120	490	-372	-508

Source: Company, MOFSL

Exhibit 9: Performance trend in its Africa operations

INR m	1QFY21	2QFY21	3QFY21	4QFY21	1QFY22	2QFY22	3QFY22	4QFY22	1QFY23	%YoY	%QoQ
Soda ash utilization (%)	65%	74%	80%	81%	73%	91%	79%	80%	95%		
Sales volume ('000MT)	57	51	56	68	83	86	73	75	83	0	11
Realization (INR/MT)	17,544	17,843	19,107	16,912	16,145	16,279	18,082	22,800	29,639	84	30
Realization (USD/MT)	231	238	256	228	219	220	243	307	384	76	25
EBITDA/MT (USD)	23	16	62	40	41	52	46	108	186	355	73
Net sales	1,000	910	1,070	1,150	1,340	1,400	1,320	1,710	2,460	84	44
EBITDA	100	60	260	200	250	330	250	600	1,190	376	98
EBITDA (%)	10.0%	6.6%	24.3%	17.4%	18.7%	23.6%	18.9%	35.1%	48.4%		
PBT	-20	-50	160	100	160	110	180	510	1,110	594	118
PAT	-20	-50	160	100	160	110	180	510	1,110	594	118

Source: Company, MOFSL

Exhibit 10: Volume trend in Soda Ash



Source: Company, MOFSL

Exhibit 11: Strategic priorities of TTCH



Deliver consistent market and customer delivery performance



· Continue focus on cost management



Extend Portfolio offerings: New product introductions, plug portfolio gaps

· Strengthen Manufacturing: Invest in manufacturing and registrations

US

- Maximize plant output & Ensure customer demand is fully met
- · Complete ANSAC exit through own supply chain & sales network
- · Generate cash and repay debt



UK

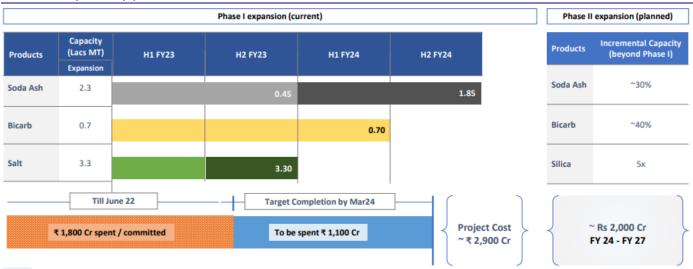
- · Maximize volumes and ensure operating performance is in line with market dynamics
- · Operational efficiencies and cost structure rationalization
- · Manage energy & carbon cost pressures and continuous cost focus
- · Sustain volume delivery to customers

Kenya

- · Continuous cost focus
- · Generate cash and deleverage

Source: Company, MOFSL

Exhibit 12: Expansion pipeline of TTCH



Source: Company, MOFSL



Highlights from the management commentary

India

- India standalone revenue growth of 48% YoY was on back of blended realization improvement of 44% YoY as volumes grew marginally by 1.2%/6% YoY in Soda Ash/Salt.
- Mithapur unit operated at full capacity during the quarter. India saw higher soda ash and bi-carb realizations on the back of strong market demand and market tightness, reflecting good demand in detergents.
- EBITDA improved due to better realizations which offset significant increase in raw material and energy costs.
- Salt volumes remained healthy (+2.5% YoY) for India during the quarter; with additional capacities expected to be commissioned by end of FY23.

TCNA

- In North America, revenue growth of 34% YoY was mainly due to 30% improvement in realization while volumes were marginally lower by 2% to 568KMT. Soda Ash realization was higher by 30% to USD255.5/MT in 1QFY23. EBIDTA/MT jumped by 55% to USD63/MT led by favorable operating leverage.
- Export prices remained strong and at above pre-covid19 levels. The company has shifted its contracting under exports from an annual to a quarterly basis. Exports formed 45% of revenues and typically range at ~45% 50%.
- Gas prices remained at elevated levels during the quarter.
- There was a production loss of 10,000 MT during the quarter, due to maintenance shutdown in one dryer. The company is confident of compensating for the loss in volumes, it expects to equal out or beat volumes v/s PY.
- Undertook part pre-payment of USD30m debt during the quarter

TCEHL

In **Europe**, revenue grew 30% YoY due to an improvement in realization (34% YoY to GBP277/MT) There was a 5% de-growth in sales volume (Soda Ash, Sodium Bicarbonate and Salt). EBITDA grew 3.4x YoY to INR980m due to higher sales realizations, despite rising input (coke, ammonia, and packaging) and fixed plant costs.

- The business was able to utilize full benefit of new carbon capture unit in 1QFY23.
- The company has a lower presence in Europe, with 0.3MMT of the total 4.3MMT capacity.
- The company has energy surcharge clauses built into its contracts in the UK and USA and hedges energy cost as well.

TCAHL

- Soda Ash volumes in **Africa** were flat YoY at 83,000MT, whereas realizations (in USD terms) grew 76% YoY to USD384/MT, leading to a revenue growth of 84%. EBITDA stood at INR1,190m v/s INR250m YoY.
- Margins improved v/s previous year on account of higher realizations and robust market demand; TTCH maintains pricing contracts on a quarterly basis.

Market dynamics in Soda Ash

- Soda Ash Price environment likely to stay robust over the next 18-24 months.
- Soda ash demand supply dynamics are expected to remain favorable up till FY25
 FY26.
- New capacities would be commissioned in Mongolia and USA by FY25-26, with some capacity in USA being commissioned earlier.
- Current prices do not reflect the complete cost effect which is a direct link to energy surcharge prices, rather are linked to market demand and supply dynamics. There would be a further price hike necessary in soda ash, in order to match the same.

Other Highlights

- Rallis: Revenue growth came in from the crop care business, while margins were impacted due to cost inflation and competitive pricing. Crop care margins improved while seeds margin was impacted and continues to be under pressure. Rallis is expected to contribute positively in H2FY23.
- Input price pressures: Gas, coal and freight costs remained at elevated levels in 1QFY23. Carbon UK ETS prices remained stable at over GBP70/MT. Limestone, coke and raw salt prices have increased.
- **Net debt** rose to INR49.8 in June'22 v/s INR42.3b as of Mar'22 (v/s INR41.2b in Dec'21). TTCH would continue to pay down debt on books with an aim of achieving debt free status in Kenya over 12 to 15 months and paying down USD100m per annum in USA.
- Capex: TTCH has incurred a capex of INR18b till June'22 and balance INR11b to be spent by Mar'24. The company aims to incur additional INR20b capex under Phase 2 (FY24 FY27) of expansion.
- Opportunities: TTCH envisions an opportunity in the solar glass and lithium carbonate segment with soda ash and sodium bicarbonate business being the main material beneficiary. Glass in India is underpenetrated and as the building infra and auto segment are expected to grow this will help the glass industry to grow.
- Strategic Focus: TTCH aims to reduce debt in the international business using cash flows and expanding the overall capacity from 4.3MMT to 7.0MMT with major focus in India.

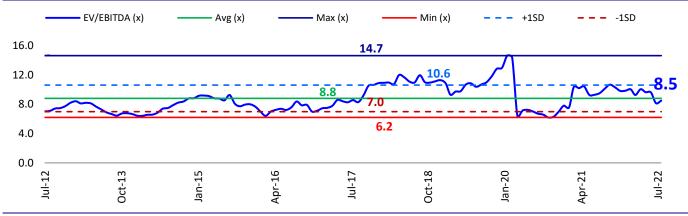
Valuation and view

- We expect the favorable soda ash demand-supply dynamics to sustain in medium term on back of emergence of newer applications such as solar glass and lithium Ion batteries. However, on a one-year forward basis, TTCH is trading at an average EV/EBITDA of 8.8x which is at par with last 10 years average.
- We expect a revenue/EBITDA/PAT CAGR of 16%/21%/15% over FY22-24.
- Factoring the strong operating performance in 1QFY23, we have raised our FY23/FY24 EBITDA estimate by 23%/11%. We maintain our **Neutral** rating with a SoTP-based TP of INR1,210/share.

Exhibit 13: Valuation methodology

Pusiness	Mathadalagu	Motrico	EV24	Multiple	EV/MCAP
Business	Methodology	Metrics	FY24	(x)	(INR m)
Commodity (INR m)					
Inorganic Chemical India (Soda Ash and others)	EV/EBITDA (x)	EBITDA	14,775	11	1,61,936
(Including manufacture of Salt)	LV/LBITDA (X)	LBITUA	14,773	11	1,01,930
Tata Chemicals North America	EV/EBITDA (x)	EBITDA	9,990	11	1,09,887
Tata Chemicals Europe and Tata Chemicals Africa	EV/EBITDA (x)	EBITDA	4,973	6	29,835
Sub Total					3,01,659
Specialty and Consumer (INR m)					
Rallis India (Tata Chemicals holds 50% stake)	20% discount to	Attributable	44,825	0.8	17,930
(INR m)	Current MCAP	m-cap	44,623	0.8	17,930
Total EV (INR m)					3,19,589
Less: Debt (INR m)					57,370
Less: Minority Interest (INR m)					9,045
Less: Pension liability (INR m)					14,665
Add: Cash and liquid investment (INR m)					37,261
Add: Value of quoted investment (INR m)		M-cap	40,549	0.8	32,439
Target m-cap (INR m)					3,08,209
Outstanding share (m)					255
Target price (INR)					1,210
		•		•	Source: MOFS

Exhibit 14: One year forward EV/EBIDTA (x)



Source: MOFSL

Exhibit 15: Changes to our earnings estimates

Earnings Change	0	ld	Ne	ew	Change		
(INR m)	FY23E	FY24E	FY23E	FY24E	FY23E	FY24E	
Revenue	1,61,833	1,66,113	1,64,223	1,68,680	1%	2%	
EBITDA	28,375	30,722	34,968	34,003	23%	11%	
Adj. PAT	13,799	14,392	18,922	16,806	37%	17%	

Source: MOFSL

MOTILAL OSWAL

Financials and valuations

Consolidated - Income Statement								(INR b)
Y/E March	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
Total Income from Operations	103.5	102.7	103.4	103.6	102.0	126.2	164.2	168.7
Change (%)	-32.0	-0.7	0.7	0.2	-1.5	23.7	30.1	2.7
Raw Materials	20.7	17.6	20.0	19.7	24.0	26.4	37.2	38.8
Employees Cost	12.6	12.7	13.2	13.8	14.0	15.4	16.7	18.6
Power, Oil & Fuel	11.6	12.7	14.8	14.5	14.4	21.1	26.8	29.5
Freight & forwarding charges	15.3	15.8	16.1	15.5	14.6	18.1	21.5	23.6
Other Expenses	22.2	22.0	21.5	20.6	20.1	22.2	27.1	24.2
Total Expenditure	82.5	80.8	85.6	84.1	87.0	103.2	129.3	134.7
% of Sales	79.8	78.7	82.8	81.2	85.3	81.7	78.7	79.8
EBITDA	20.9	21.9	17.8	19.5	15.0	23.0	35.0	34.0
Margin (%)	20.2	21.3	17.2	18.8	14.7	18.3	21.3	20.2
Depreciation	5.1	5.2	5.7	6.7	7.6	8.1	8.6	9.3
EBIT	15.8	16.7	12.1	12.8	7.4	15.0	26.4	24.7
Int. and Finance Charges	3.0	3.3	3.5	3.4	3.7	3.0	3.2	3.4
Other Income	1.7	1.6	4.1	3.1	2.3	2.6	1.9	2.2
PBT bef. EO Exp.	14.5	15.1	12.7	12.5	6.1	14.5	25.1	23.5
EO Items	0.0	0.6	0.7	0.0	0.0	-0.1	0.0	0.0
PBT after EO Exp.	14.5	15.7	13.4	12.5	6.1	14.4	25.1	23.5
Total Tax	3.5	0.6	2.7	2.2	2.0	2.7	5.8	5.8
Tax Rate (%)	23.8	3.8	20.5	17.5	32.5	18.5	23.3	24.5
MI & Profit/Loss of Asso. Cos.	2.3	2.2	1.3	2.3	1.5	-0.8	0.3	0.9
Reported PAT - Continuing Ops.	8.8	12.9	9.3	8.1	2.6	12.5	18.9	16.8
Adjusted PAT - Continuing Ops.	8.8	12.3	8.6	8.1	2.6	12.6	18.9	16.8
Change (%)	26.3	39.4	-29.7	-6.4	-68.2	392.9	49.7	-11.2
Margin (%)	8.5	11.9	8.3	7.8	2.5	10.0	11.5	10.0
Reported PAT - Discontinuing Ops.	1.1	11.4	2.2	62.0	0.0	0.0	0.0	0.0
Reported PAT	9.9	24.3	11.6	70.1	2.6	12.6	18.9	16.8
Adjusted PAT	9.9	23.7	10.9	70.1	2.6	12.7	18.9	16.8
Consolidated Balance Shoot								(IND b)
Consolidated - Balance Sheet	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	(INR b) FY24E
Y/E March	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Equity Share Capital								
Total Reserves Net Worth	76.5 79.1	108.5 111.0	120.9 123.4	126.4 129.0	140.4 142.9	180.0 182.5	195.6 198.1	209.0 211.6
	26.2	27.2	29.1	7.6	8.5	9.0	9.0	9.0
Minority Interest Total Loans	70.5	64.2	61.4	7.0	69.3	70.3	67.2	57.4
Lease liability	0.0	0.0	0.0	1.9	1.9	1.4	1.9	1.9
Deferred Tax Liabilities	12.4	11.9	13.0	14.4	15.7	20.4	20.4	
Capital Employed			13.0	17.7	13.7	20.7		
	188 7	2143	227.0	229 9	238 4	283 5		20.4
	188.2 120.0	214.3 126.1	227.0	229.9	238.4	283.5	296.6	20.4 300.3
Gross Block	120.0	126.1	138.1	161.5	168.2	183.5	296.6 205.4	20.4 300.3 216.4
Gross Block Less: Accum. Deprn.	120.0 10.6	126.1 15.8	138.1 21.5	161.5 28.1	168.2 35.7	183.5 43.8	296.6 205.4 52.4	20.4 300.3 216.4 61.7
Gross Block Less: Accum. Deprn. Net Fixed Assets	120.0 10.6 109.4	126.1 15.8 110.3	138.1 21.5 116.6	161.5 28.1 133.3	168.2 35.7 132.4	183.5 43.8 139.7	296.6 205.4 52.4 153.0	20.4 300.3 216.4 61.7 154.8
Gross Block Less: Accum. Deprn. Net Fixed Assets Goodwill on Consolidation	120.0 10.6 109.4 17.0	126.1 15.8 110.3 17.3	138.1 21.5 116.6 18.6	161.5 28.1 133.3 19.5	168.2 35.7 132.4 19.2	183.5 43.8 139.7 19.7	296.6 205.4 52.4 153.0 19.7	20.4 300.3 216.4 61.7 154.8 19.7
Gross Block Less: Accum. Deprn. Net Fixed Assets Goodwill on Consolidation Capital WIP	120.0 10.6 109.4 17.0 3.3	126.1 15.8 110.3 17.3 4.1	138.1 21.5 116.6 18.6 7.7	161.5 28.1 133.3 19.5 8.4	168.2 35.7 132.4 19.2 10.9	183.5 43.8 139.7 19.7 16.7	296.6 205.4 52.4 153.0 19.7 7.8	20.4 300.3 216.4 61.7 154.8 19.7 6.8
Gross Block Less: Accum. Deprn. Net Fixed Assets Goodwill on Consolidation Capital WIP Current Investments	120.0 10.6 109.4 17.0 3.3 2.2	126.1 15.8 110.3 17.3 4.1 0.9	138.1 21.5 116.6 18.6 7.7 22.5	161.5 28.1 133.3 19.5 8.4 16.0	168.2 35.7 132.4 19.2 10.9 15.6	183.5 43.8 139.7 19.7 16.7 13.3	296.6 205.4 52.4 153.0 19.7 7.8 13.3	20.4 300.3 216.4 61.7 154.8 19.7 6.8 13.3
Gross Block Less: Accum. Deprn. Net Fixed Assets Goodwill on Consolidation Capital WIP Current Investments Total Investments	120.0 10.6 109.4 17.0 3.3 2.2 27.9	126.1 15.8 110.3 17.3 4.1 0.9 28.7	138.1 21.5 116.6 18.6 7.7 22.5 56.4	161.5 28.1 133.3 19.5 8.4 16.0 43.1	168.2 35.7 132.4 19.2 10.9 15.6 58.7	183.5 43.8 139.7 19.7 16.7 13.3 77.4	296.6 205.4 52.4 153.0 19.7 7.8 13.3 77.4	20.4 300.3 216.4 61.7 154.8 19.7 6.8 13.3 77.4
Gross Block Less: Accum. Deprn. Net Fixed Assets Goodwill on Consolidation Capital WIP Current Investments Total Investments Curr. Assets, Loans&Adv.	120.0 10.6 109.4 17.0 3.3 2.2 27.9 78.5	126.1 15.8 110.3 17.3 4.1 0.9 28.7 98.4	138.1 21.5 116.6 18.6 7.7 22.5 56.4 69.6	161.5 28.1 133.3 19.5 8.4 16.0 43.1 72.6	168.2 35.7 132.4 19.2 10.9 15.6 58.7 62.1	183.5 43.8 139.7 19.7 16.7 13.3 77.4 84.9	296.6 205.4 52.4 153.0 19.7 7.8 13.3 77.4	20.4 300.3 216.4 61.7 154.8 19.7 6.8 13.3 77.4 110.6
Gross Block Less: Accum. Deprn. Net Fixed Assets Goodwill on Consolidation Capital WIP Current Investments Total Investments Curr. Assets, Loans&Adv. Inventory	120.0 10.6 109.4 17.0 3.3 2.2 27.9 78.5 13.9	126.1 15.8 110.3 17.3 4.1 0.9 28.7 98.4 14.6	138.1 21.5 116.6 18.6 7.7 22.5 56.4 69.6 17.3	161.5 28.1 133.3 19.5 8.4 16.0 43.1 72.6 18.7	168.2 35.7 132.4 19.2 10.9 15.6 58.7 62.1 16.9	183.5 43.8 139.7 19.7 16.7 13.3 77.4 84.9 22.9	296.6 205.4 52.4 153.0 19.7 7.8 13.3 77.4 103.7 28.0	20.4 300.3 216.4 61.7 154.8 19.7 6.8 13.3 77.4 110.6
Gross Block Less: Accum. Deprn. Net Fixed Assets Goodwill on Consolidation Capital WIP Current Investments Total Investments Curr. Assets, Loans&Adv.	120.0 10.6 109.4 17.0 3.3 2.2 27.9 78.5 13.9 20.9	126.1 15.8 110.3 17.3 4.1 0.9 28.7 98.4	138.1 21.5 116.6 18.6 7.7 22.5 56.4 69.6 17.3 14.5	161.5 28.1 133.3 19.5 8.4 16.0 43.1 72.6	168.2 35.7 132.4 19.2 10.9 15.6 58.7 62.1	183.5 43.8 139.7 19.7 16.7 13.3 77.4 84.9	296.6 205.4 52.4 153.0 19.7 7.8 13.3 77.4	20.4 300.3 216.4 61.7 154.8 19.7 6.8 13.3 77.4 110.6 29.2 24.5
Gross Block Less: Accum. Deprn. Net Fixed Assets Goodwill on Consolidation Capital WIP Current Investments Total Investments Curr. Assets, Loans&Adv. Inventory Account Receivables	120.0 10.6 109.4 17.0 3.3 2.2 27.9 78.5 13.9	126.1 15.8 110.3 17.3 4.1 0.9 28.7 98.4 14.6 13.1 44.8	138.1 21.5 116.6 18.6 7.7 22.5 56.4 69.6 17.3	161.5 28.1 133.3 19.5 8.4 16.0 43.1 72.6 18.7 15.8	168.2 35.7 132.4 19.2 10.9 15.6 58.7 62.1 16.9 14.0	183.5 43.8 139.7 19.7 16.7 13.3 77.4 84.9 22.9 19.3	296.6 205.4 52.4 153.0 19.7 7.8 13.3 77.4 103.7 28.0 23.8 19.0	20.4 300.3 216.4 61.7 154.8 19.7 6.8 13.3 77.4 110.6 29.2 24.5 24.0
Gross Block Less: Accum. Deprn. Net Fixed Assets Goodwill on Consolidation Capital WIP Current Investments Total Investments Curr. Assets, Loans&Adv. Inventory Account Receivables Cash and Bank Balance	120.0 10.6 109.4 17.0 3.3 2.2 27.9 78.5 13.9 20.9 16.6	126.1 15.8 110.3 17.3 4.1 0.9 28.7 98.4 14.6 13.1	138.1 21.5 116.6 18.6 7.7 22.5 56.4 69.6 17.3 14.5	161.5 28.1 133.3 19.5 8.4 16.0 43.1 72.6 18.7 15.8 20.8	168.2 35.7 132.4 19.2 10.9 15.6 58.7 62.1 16.9 14.0	183.5 43.8 139.7 19.7 16.7 13.3 77.4 84.9 22.9 19.3 13.1	296.6 205.4 52.4 153.0 19.7 7.8 13.3 77.4 103.7 28.0 23.8	20.4 300.3 216.4 61.7 154.8 19.7 6.8 13.3 77.4 110.6 29.2 24.5 24.0 32.9
Gross Block Less: Accum. Deprn. Net Fixed Assets Goodwill on Consolidation Capital WIP Current Investments Total Investments Curr. Assets, Loans&Adv. Inventory Account Receivables Cash and Bank Balance Loans and Advances	120.0 10.6 109.4 17.0 3.3 2.2 27.9 78.5 13.9 20.9 16.6 27.0	126.1 15.8 110.3 17.3 4.1 0.9 28.7 98.4 14.6 13.1 44.8 25.9	138.1 21.5 116.6 18.6 7.7 22.5 56.4 69.6 17.3 14.5 19.5	161.5 28.1 133.3 19.5 8.4 16.0 43.1 72.6 18.7 15.8 20.8 17.3	168.2 35.7 132.4 19.2 10.9 15.6 58.7 62.1 16.9 14.0 14.1	183.5 43.8 139.7 19.7 16.7 13.3 77.4 84.9 22.9 19.3 13.1 29.6	296.6 205.4 52.4 153.0 19.7 7.8 13.3 77.4 103.7 28.0 23.8 19.0 32.8 65.0	20.4 300.3 216.4 61.7 154.8 19.7 6.8 13.3 77.4 110.6 29.2 24.5 24.0 32.9 69.0
Gross Block Less: Accum. Deprn. Net Fixed Assets Goodwill on Consolidation Capital WIP Current Investments Total Investments Curr. Assets, Loans&Adv. Inventory Account Receivables Cash and Bank Balance Loans and Advances Curr. Liability & Prov.	120.0 10.6 109.4 17.0 3.3 2.2 27.9 78.5 13.9 20.9 16.6 27.0 47.9	126.1 15.8 110.3 17.3 4.1 0.9 28.7 98.4 14.6 13.1 44.8 25.9	138.1 21.5 116.6 18.6 7.7 22.5 56.4 69.6 17.3 14.5 19.5 18.3 42.1	161.5 28.1 133.3 19.5 8.4 16.0 43.1 72.6 18.7 15.8 20.8 17.3 47.0	168.2 35.7 132.4 19.2 10.9 15.6 58.7 62.1 16.9 14.0 14.1 17.2 45.0	183.5 43.8 139.7 19.7 16.7 13.3 77.4 84.9 22.9 19.3 13.1 29.6 54.9	296.6 205.4 52.4 153.0 19.7 7.8 13.3 77.4 103.7 28.0 23.8 19.0 32.8	20.4 300.3 216.4 61.7 154.8 19.7 6.8 13.3 77.4 110.6 29.2 24.5 24.0 32.9 69.0 31.9
Gross Block Less: Accum. Deprn. Net Fixed Assets Goodwill on Consolidation Capital WIP Current Investments Total Investments Curr. Assets, Loans&Adv. Inventory Account Receivables Cash and Bank Balance Loans and Advances Curr. Liability & Prov. Account Payables	120.0 10.6 109.4 17.0 3.3 2.2 27.9 78.5 13.9 20.9 16.6 27.0 47.9 13.2	126.1 15.8 110.3 17.3 4.1 0.9 28.7 98.4 14.6 13.1 44.8 25.9 44.5 14.8	138.1 21.5 116.6 18.6 7.7 22.5 56.4 69.6 17.3 14.5 19.5 18.3 42.1 14.8	161.5 28.1 133.3 19.5 8.4 16.0 43.1 72.6 18.7 15.8 20.8 17.3 47.0 16.3 11.4	168.2 35.7 132.4 19.2 10.9 15.6 58.7 62.1 16.9 14.0 14.1 17.2 45.0	183.5 43.8 139.7 19.7 16.7 13.3 77.4 84.9 22.9 19.3 13.1 29.6 54.9 24.4	296.6 205.4 52.4 153.0 19.7 7.8 13.3 77.4 103.7 28.0 23.8 19.0 32.8 65.0 30.5 14.8	20.4 300.3 216.4 61.7 154.8 19.7 6.8 13.3 77.4 110.6 29.2 24.5 24.0 32.9 69.0 31.9 15.2
Gross Block Less: Accum. Deprn. Net Fixed Assets Goodwill on Consolidation Capital WIP Current Investments Total Investments Curr. Assets, Loans&Adv. Inventory Account Receivables Cash and Bank Balance Loans and Advances Curr. Liability & Prov. Account Payables Other Current Liabilities	120.0 10.6 109.4 17.0 3.3 2.2 27.9 78.5 13.9 20.9 16.6 27.0 47.9 13.2 14.1	126.1 15.8 110.3 17.3 4.1 0.9 28.7 98.4 14.6 13.1 44.8 25.9 44.5 14.8 10.9	138.1 21.5 116.6 18.6 7.7 22.5 56.4 69.6 17.3 14.5 19.5 18.3 42.1 14.8 9.5	161.5 28.1 133.3 19.5 8.4 16.0 43.1 72.6 18.7 15.8 20.8 17.3 47.0 16.3	168.2 35.7 132.4 19.2 10.9 15.6 58.7 62.1 16.9 14.0 14.1 17.2 45.0 16.8 8.5	183.5 43.8 139.7 19.7 16.7 13.3 77.4 84.9 22.9 19.3 13.1 29.6 54.9 24.4 13.9	296.6 205.4 52.4 153.0 19.7 7.8 13.3 77.4 103.7 28.0 23.8 19.0 32.8 65.0 30.5	20.4 300.3 216.4 61.7 154.8 19.7 6.8 13.3 77.4 110.6 29.2 24.5 24.0 32.9 69.0 31.9 15.2 21.9
Gross Block Less: Accum. Deprn. Net Fixed Assets Goodwill on Consolidation Capital WIP Current Investments Total Investments Curr. Assets, Loans&Adv. Inventory Account Receivables Cash and Bank Balance Loans and Advances Curr. Liability & Prov. Account Payables Other Current Liabilities Provisions	120.0 10.6 109.4 17.0 3.3 2.2 27.9 78.5 13.9 20.9 16.6 27.0 47.9 13.2 14.1 20.6	126.1 15.8 110.3 17.3 4.1 0.9 28.7 98.4 14.6 13.1 44.8 25.9 44.5 14.8 10.9 18.8	138.1 21.5 116.6 18.6 7.7 22.5 56.4 69.6 17.3 14.5 19.5 18.3 42.1 14.8 9.5 17.8	161.5 28.1 133.3 19.5 8.4 16.0 43.1 72.6 18.7 15.8 20.8 17.3 47.0 16.3 11.4 19.3	168.2 35.7 132.4 19.2 10.9 15.6 58.7 62.1 16.9 14.0 14.1 17.2 45.0 16.8 8.5 19.6	183.5 43.8 139.7 19.7 16.7 13.3 77.4 84.9 22.9 19.3 13.1 29.6 54.9 24.4 13.9 16.5	296.6 205.4 52.4 153.0 19.7 7.8 13.3 77.4 103.7 28.0 23.8 19.0 32.8 65.0 30.5 14.8 19.7	20.4 300.3 216.4 61.7 154.8 19.7 6.8 13.3 77.4 110.6 29.2 24.5 24.0 32.9 69.0 31.9 15.2 21.9 41.6 0.0

MOTILAL OSWAL

Financials and valuations

Ratios								
Y/E March	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
Basic (INR)								
EPS	34.5	48.1	33.8	31.7	10.1	49.6	74.3	66.0
Cash EPS	54.6	68.5	56.1	57.8	39.9	81.2	107.9	102.4
BV/Share	310.3	435.7	484.3	506.1	560.8	716.3	777.4	830.4
DPS	11.0	22.0	12.5	11.0	10.0	12.5	13.0	13.0
Payout (%)	39.2	53.4	42.0	42.7	122.3	31.3	17.5	19.7
Valuation (x)								
P/E	31.1	22.3	31.8	33.9	106.8	21.7	14.5	16.3
Cash P/E	19.7	15.7	19.1	18.6	27.0	13.2	10.0	10.5
P/BV	3.5	2.5	2.2	2.1	1.9	1.5	1.4	1.3
EV/Sales	3.4	3.1	3.1	3.1	3.2	2.6	1.9	1.8
EV/EBITDA	16.8	14.6	18.1	16.5	21.4	14.2	9.1	8.9
Dividend Yield (%)	1.0	2.0	1.2	1.0	0.9	1.2	1.2	1.2
FCF per share	113.3	76.9	19.7	-16.3	45.0	-29.1	57.1	83.1
Return Ratios (%)								
RoE	11.9	12.9	7.4	6.4	1.9	7.8	9.9	8.2
RoCE	8.6	10.9	7.2	6.7	3.1	6.2	8.4	7.6
Core RoCE	10.8	15.6	11.2	10.5	5.1	10.2	14.0	12.9
RoIC	8.1	11.6	6.9	7.0	3.2	7.4	11.0	9.7
Working Capital Ratios								
Fixed Asset Turnover (x)	0.9	0.8	0.7	0.6	0.6	0.7	0.8	0.8
Asset Turnover (x)	0.5	0.5	0.5	0.5	0.4	0.4	0.6	0.6
Inventory (Days)	244	304	315	347	257	317	275	275
Debtor (Days)	74	46	51	56	50	56	53	53
Creditor (Days)	232	307	269	302	256	338	300	300
Leverage Ratio (x)								
Current Ratio	1.6	2.2	1.7	1.5	1.4	1.5	1.6	1.6
Interest Cover Ratio	5.3	5.1	3.4	3.8	2.0	4.9	8.2	7.2
Net Debt/Equity	0.7	0.2	0.2	0.3	0.3	0.2	0.2	0.1
Consolidated - Cash Flow Statement								(INR b)
Y/E March	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
OP/(Loss) before Tax	16.5	15.1	17.3	12.5	6.1	14.5	25.1	23.5
Depreciation	5.5	5.2	5.7	6.7	7.6	8.1	8.6	9.3
Interest & Finance Charges	4.6	1.7	3.7	0.3	1.3	0.5	1.3	1.2
Direct Taxes Paid	-4.5	-0.6	-4.8	-2.2	-2.0	-2.7	-5.8	-5.8
(Inc)/Dec in WC	12.1	4.8	-2.1	0.5	7.3	-6.1	-2.7	2.0
CF from Operations	34.3	26.1	19.7	17.8	20.4	14.3	26.4	30.3
Others	1.0	0.6	-3.9	0.0	0.0	-0.1	1.1	0.9
CF from Operating incl EO	35.3	26.7	15.8	17.8	20.4	14.2	27.6	31.2
(Inc)/Dec in FA	-6.4	-7.1	-10.8	-22.0	-8.9	-21.6	-13.0	-10.0
Free Cash Flow	28.9	19.6	5.0	-4.2	11.5	-7.4	14.6	21.2
(Pur)/Sale of Investments	-2.1	-0.8	-19.7	13.4	-15.6	-18.7	0.0	0.0
Others	0.6	1.6	10.9	-15.1	13.2	31.9	1.9	2.2
CF from Investments	-7.9	-6.3	-19.6	-23.7	-11.3	-8.4	-11.1	-7.8
Issue of Shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inc/(Dec) in Debt	-14.1	-6.3	-5.7	12.6	-7.7	0.9	-3.1	-9.8
Interest Paid	-4.5	-3.3	-2.9	-3.4	-3.7	-3.0	-3.2	-3.4
Dividend Paid	-3.1	-6.9	-6.7	-3.4	-3.1	-3.9	-3.3	-3.3
Others	-1.8	24.2	-6.2	1.4	-1.3	-0.8	-1.0	-1.8
	-23.4	7.7	-21.5	7.2	-15.8	-6.9	-10.6	-18.3
CF from Fin. Activity	-23.4							
CF from Fin. Activity Inc/Dec of Cash						-1.0	5.9	5.0
CF from Fin. Activity Inc/Dec of Cash Opening Balance	4.0 12.7	28.2 16.6	-25.3 44.8	1.3 19.5	-6.7 20.8	-1.0 14.1	5.9 13.1	5.0 19.0

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 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, Investment Advisory Services, Depository participant services & distribution of various financial products. MOFSL is a subsidiary company of Passionate Investment Management Pvt. Ltd.. (PIMPL). 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 (DSL), 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 Motifal Oswal Financial Services Limited are available on the website at http://onlinereports.motifaloswal.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 or prokerage pending transactions. Details of Enquiry Proceedings of Motilal Oswal Financial Services Limited available are tigation.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

- 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 company
- 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
- 6
- 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
- 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
- received compensation/other benefits from the subject company in the past 12 months
- 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.

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

11 10 August 2022

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

Analyst Certification

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

Terms & Conditions:

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

Disclaimer

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

of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 71934200/ 022-71934263; Website www.motilaloswal.com. CIN no.: L67190MH2005PLC153397.Correspondence Office Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad(West), Mumbai- 400 064. Tel No: 022 7188 1000.

Registration Nos.: Motilal Oswal Financial Services Limited (MOFSL)*: INZ000158836(BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412. AMFI: ARN - 146822; Investment Adviser: INA00007100; Insurance Corporate Agent: CA0579;PMS:INP000006712. Motilal Oswal Asset Management Company Ltd. (MOAMC): PMS (Registration No.: INP000000670); PMS and Mutual Funds are offered through MOAMC which is group company of MOFSL. Motilal Oswal Wealth Management Ltd. (MOWML): PMS (Registration No.: INP000004409) is offered through MOWML, which is a group company of MOFSL. Motilal Oswal Financial Services Limited is a distributor of Mutual Funds, PMS, Fixed Deposit, Bond, NCDs,Insurance Products and IPOs.Real Estate is offered through Motilal Oswal Real Estate Investment Advisors II Pvt. Ltd. which is a group company of MOFSL. Private Equity is offered through Motilal Oswal Private Equity Investment Advisors Pvt. Ltd. which is a group company of MOFSL. Research & Advisory services is backed by proper research. Please read the Risk Disclosure Document prescribed by the Stock Exchanges carefully before investing. There is no assurance or guarantee of the returns. Investment in securities market is subject to market risk, read all the related documents carefully before investing. Details of Compliance Officer: Name: Neeraj Agarwal, Email ID: na@motilaloswal.com, Contact No.:022-71881085.

* MOSL has been amalgamated with Motilal Oswal Financial Services Limited (MOFSL) w.e.f August 21, 2018 pursuant to order dated July 30, 2018 issued by Hon'ble National Company Law Tribunal, Mumbai Bench.