

Grasim

Neutral

Estimate change
TP change
Rating change

Motilal Oswal values your support in the Asiamoney Brokers Poll 2020 for India Research, Sales and Trading team. We request your ballot.



Bloomberg	GRASIM IN
Equity Shares (m)	657
M.Cap.(INRb)/(USDb)	396 / 5.1
52-Week Range (INR)	950 / 380
1, 6, 12 Rel. Per (%)	9/-5/-17
12M Avg Val (INR M)	1600

Financial Snapshot (INR bn)

	•		
Y/E MARCH	2020	2021E	2022E
Sales	186.1	161.4	186.2
EBITDA	23.1	16.8	22.7
Adj. PAT	12.6	6.4	9.3
EBITDA Margin (%)	12.4	10.4	12.2
S/A Adj. EPS (INR)	19.2	9.7	14.1
S/A EPS Gr. (%)	-56.2	-49.4	45.2
Consol EPS (INR)	67.3	43.9	68.6
BV/Sh. (INR)	572.9	578.6	588.7
Ratios			
Net D:E	0.1	0.1	0.1
RoE (%)	3.4	1.7	2.4
RoCE (%)	4.7	2.7	3.7
Valuations			
P/E (x)	31.4	62.0	42.7
P/BV (x)	1.1	1.0	1.0
Div. Yield (%)	0.0	0.7	0.7
FCF Yield (%)	2.1	1.3	-2.2

Shareholding pattern (%)

As On	Mar-20	Dec-19	Mar-19
Promoter	40.3	40.1	40.2
DII	22.9	22.6	18.7
FII	13.7	16.2	20.2
Others	23.2	21.1	21.0

FII Includes depository receipts

Margin deteriorates further on lower prices

VSF and Chemicals businesses in downcycle

CMP: INR602

 Grasim's results highlight the significant pressure in its standalone business due to the downcycle witnessed in both its Viscose and Chemicals businesses, which reported the weakest margins in the last 18 quarters.

TP: INR630 (+5%)

We keep our FY21/FY22 estimates broadly unchanged and maintain our
 Neutral rating on a weak margin outlook.

Lower realizations weaken profitability

- Standalone revenue declined 19% YoY to INR43b (in-line) in 4QFY20 due to lower realization. Revenue declined 20% YoY to INR21b in VSF and 24% YoY to INR12.9b in Chemicals.
- EBITDA declined 56% YoY to INR3.9b (in-line) due to lower prices, with the margin contracting 7.6pp YoY / 0.1pp QoQ to 9.1%.
- Continued price decline led to margin contraction of 3.3pp YoY to 12.4% in VSF and 17.6pp YoY to 8.1% in Chemicals.
- Adj. PAT was down 77% YoY to INR1.1b, v/s our estimate of INR1.7b, due to lower-than-expected other income.
- The company reversed deferred tax liability of INR2.4b in 4QFY20.
- FY20 rev. / EBITDA / Adj. PAT declined 9%/43%/56% YoY to INR186b/INR23b/INR12.6b.

Highlights from management commentary

- The fertilizer plant continued to operate normally even during lockdown.
- The VSF and Chemicals businesses commenced operations over Apr–May. Currently, capacity utilization is at 30–40% for VSF and at 60% for Chemicals. The VSF plant is currently catering to domestic market.
- VSF demand would take another two months to recover as the markets open up gradually and assuming China operates at current utilization (65%).
- Management expects VSF prices to have bottomed as current prices cover only variable costs, which is causing marginal players to cut production.
- EBITDA for Chemicals was impacted due to lower sales volumes and lower ECU realization (INR26.6k,-4% QoQ). Lower demand, higher imports, weak global prices, and new domestic capacities led to weaker Chemicals realization.
- The company has put expansion plans on hold due to weak demand.

Valuation and view

- We expect standalone RoE to be weak at ~2% over the next two years due to: a) margin pressure in both VSF and Chemicals and b) higher depreciation and interest cost owing to capacity additions.
- Given Grasim's conglomerate business structure, we value it on an SOTP basis: a) the standalone businesses (Fiber, Chemicals, etc.) at 6x FY22E EV/EBITDA, b) UltraTech at a 60% holding company discount to target price, and c) other listed investments (AB Capital, Vodafone Idea, Hindalco, and Aditya Birla Fashion) at a 60% holdco discount to market prices. Thus, we arrive at a fair value of INR630. Maintain Neutral.

Amit Murarka - Research analyst (Amit.Murarka@motilaloswal.com) +91 22 7199 2309

Quarterly Performance (S/	A)										(11)	vk m)
Y/E March		FY1	9			FY2	20		FY19	FY20	FY20	Var.
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			4QE	(%)
Net Sales	47,892	51,185	52,929	53,523	50,006	47,974	44,989	43,125	205,504	1,86,094	42,107	2
YoY Change (%)	74.8	26.8	20.9	16.2	4.4	-6.3	-15.0	-19.4	30.2	-9.4	-21.3	
EBITDA	10,542	10,705	10,526	8,986	8,437	6,593	4,134	3,941	40,712	23,106	3,933	0
Margins (%)	22.0	20.9	19.9	16.8	16.9	13.7	9.2	9.1	19.8	12.4	9.3	
Depreciation	1,827	1,874	1,928	1,974	2,032	2,085	2,123	2,227	7,604	8,468	2,124	
Interest	588	522	413	468	780	861	673	724	1,991	3,039	793	
Other Income	1,217	2,818	585	1,013	847	2,862	813	733	5,680	5,254	1,012	
PBT before EO Items	9,343	11,127	8,770	7,557	6,471	6,510	2,150	1,723	36,797	16,854	2,028	-15
Extraordinary Inc/(Exp)	0	-22,834	0	-847	-2,902	0	-102	63	-23,680	-2,941	0	
PBT after EO Items	9,343	-11,706	8,770	6,710	3,570	6,510	2,048	1,786	13,117	13,913	2,028	-12
Tax	2,918	160	2,689	2,198	1,553	1,245	202	-1,785	7,964	1,214	312	
Rate (%)	31.2	-1.4	30.7	32.8	43.5	19.1	9.8	-100.0	60.7	8.7	15.4	
Reported PAT	6,426	-11,867	6,082	4,512	2,017	5,265	1,847	3,571	5,153	12,700	1,715	108
Adj. PAT	6,426	10,967	6,082	5,359	4,395	5,265	1,887	1,079	28,833	12,625	1,715	-37
Margins (%)	13.4	21.4	11.5	10.0	8.8	11.0	4.2	2.5	14.0	6.8	4.1	
YoY Change (%)	85.1	74.5	28.3	-9.4	-31.6	-52.0	-69.0	-79.9	41.4	-56.2	-68.0	

E: MOFSL Estimates



Quartorly Borformanco (S/A)

Highlights from management commentary

COVID-19 impact on operations

 Sudden lockdown impacted March volumes as the last week is usually a busy season.

(IND m)

- VSF and Chemicals commenced operations over Apr–May. Currently, the VSF plant is operating at 30–40% capacity utilization in June, whereas Chemicals plants are operating at 60% utilization. The VSF plant currently caters to the domestic market.
- The fertilizer plant continued to operate normally even during lockdown.

VSF

- The share of VAP sales in the total sales stood at 24% (+2% QoQ).
- The price premium of VAP over grey increased significantly in 4QFY20.
- Consumption cost for pulp fell to INR53,782/t in 4QFY20 v/s INR60,524/t in 3QFY20. Pulp price remained below USD650/t in 4QFY20 (flattish QoQ).
- VFY profitability was impacted by lower sales volumes (15% down QoQ) due to slowdown in the Automobile market in Europe and an overall weak domestic market due to the COVID-19 shutdown.
- Viscose pricing has stabilized in the Indian market, which has been protected by the government from cheaper Chinese imports.
- Despite COVID-19, Chinese VSF capacities continued to operate at normal utilization levels, leading to inventory pile-up in the absence of domestic demand. Textile demand in China has failed to pick up as expected, which has resulted in high inventory of 125 days (normally 40–45 days), forcing production cuts. Currently, the Chinese VSF industry is operating at ~65% utilization.
- VSF demand would take another two months to recover as markets open up gradually and assuming China operates at current utilization (65%).
- In CY19, global VSF demand grew 7% YoY, implying gains in market share from other fibers as growth in total fiber demand came in lower at 2% YoY.
- Management expects VSF prices to have bottomed as current prices cover only variable costs, which is causing marginal players to cut production.

Chemicals

- EBITDA for Chemicals was impacted due to lower sales volumes and lower ECU realization (INR26.6k,-4% QoQ). Lower demand, higher imports, weak global prices, and ramp-up in new domestic capacities by ~620ktpa resulted in weaker Chemicals realization.
- The Epoxy business' EBITDA improved YoY on lower input prices.
- Chlorine realization was negative in 4QFY20 due to excess supply.
- Demand for Chlorine value-added products (VAPs) improved with increased usage in Health and Hygiene products in the current COVID-19 crisis.
- Chlorine consumption in VAPs improved to 31% in Q4FY20 from 28% in 4QFY19.

Fertilizer

- Industry urea sales for FY20 came in higher by 6% YoY at 31.72 MTPA.
- Grasim's urea production and sales were lower in Q4FY20 at 270KT and 256KT on account of nine days of maintenance shutdown.
- The company received fixed cost reimbursement of INR230m for FY20 from the government in 4QFY20. It expects to receive INR250m every year on account of fixed cost reimbursement.

Cement (UltraTech)

- Volumes were lower by 16% YoY due to the impact of COVID-19.
- Century Cement and the Nathdwara plant reported improvement in realization, operational parameters, and EBITDA/ton.
- Operating cost (Q4FY20) declined on a YoY basis; Logistics was down 3% and Energy 13%.
- Consolidated net debt reduced by INR52b to INR168.6b in 4QFY20. For Indian operations, net debt/EBITDA stood at 1.55x as of Mar'20.

Aditya Birla Capital

- FY20 consol. revenue/PAT after minority stood at INR168b/INR9.2b.
- NBFC and HFC have diversified portfolios, with a focus on growing select segments and strong focus on quality of book, with lower ticket sizes across the board.
- In Life Insurance, in FY20, total gross premiums were up 7% YoY to INR80.1b and renewal premium was up 21% to INR 43.5b; 13th month persistency was at 83%.
- In the Health Insurance business, gross written premiums increased to INR8.7b in FY20, up 76% YoY, with the retail mix at 72% v/s 65% in the previous year.

Others

- Capex spend during FY20 was at INR28b.
- Unspent capex at FY20 end stood at INR49b on various projects, including normal modernization and maintenance capex of INR16b.
- The company has put expansion plans on hold and deferred its capex guidance for FY21 for the time being.
- Standalone net debt stood at INR29.7b in FY20 (v/s INR3b in FY19). This includes interest-free debt of INR3.3b, which the company has repaid in 1QFY21.

MOTILAL OSWAL

Key exhibits

Exhibit 1: SOTP valuation

Contribution to Grasim's value	INR b	INR/share
UltraTech at target price	688	1,046
Aditya Birla Capital at CMP	68	103
Vodafone Idea at CMP	33	50
Hindalco at CMP	13	20
Aditya Birla Fashion and Retail at CMP	13	20
Total value of listed investments	815	1,239
Conglomerate discount at 60%	489	744
Net value of listed investments post discount	326	496
Parent business at 6x FY22 EV/EBITDA	89	135
Total equity value	415	630
SOTP based target price		630

Source: MOFSL

Exhibit 2: VSF business performance

	4QFY20	4QFY19	% YoY	4QFY20	% QoQ
Production (ton)	1,41,000	1,41,000	0.0	1,58,000	-10.8
Sales volume (ton)	1,46,000	1,50,000	-2.7	1,48,000	-1.4
Net Turnover (INR m)	21,020	26,250	-19.9	21,940	-4.2
PBIDT Margin (%)	12.42	15.73	-3.3	11.67	0.7
EBITDA (INR m)	2,610	4,130	-36.8	2,560	2.0

Source: MOFSL, Company

Exhibit 3: Chemicals business performance

	4QFY20	4QFY19	% YoY	4QFY20	% QoQ
Production (ton)	2,50,000	2,54,000	-1.6	2,57,000	-2.7
Sales volume (ton)	2,52,000	2,61,000	-3.4	2,61,000	-3.4
Net Turnover (INR m)	12,900	16,880	-23.6	13,620	-5.3
PBIDT Margin (%)	8.1	25.7	-17.6	13.6	-5.5
EBITDA (INR m)	1,040	4,340	-76.0	1,850	-43.8
EDITOR (IIIII)	1,040	7,340	70.0	1,030	73.0

Source: MOFSL, Company

Exhibit 4: Capacity expansion plans on hold

LAN			
Particulars	Capex (Net of CWIP as on 1/4/2019)	Capex spent	Balance Capex to be spen
Capital expenditure for Capacity Expansion			
Viscose Staple Fibre (from 566 KTPA to 788 KTPA)	3,279	1,496	1,783
Viscose Filament Yarn	182	82	100
Chemical (from 1,147 KTPA to 1,457 KTPA)	1,562	415	1,147
Total	5,023	1,993	3,030
Normal Modernisation and Maintenance Capex			
Viscose Staple Fibre	1,108	358	750
Viscose Filament Yarn	252	83	169
Chemical	1,018	291	727
Total	2,378	732	1,646
Capex related to other businesses			
Epoxy, Textiles, Fertiliser and Insulator	374	103	271
Total	7,775	2,828	4,947

The capacity expansion plans have been put on hold. We are closely monitoring the emerging deman scenario due to lock down situation.

Source: MOFSL, Company

Valuation and view

Expect muted EPS growth, continued weak RoE

Grasim's margins in the VSF and Chemicals segments peaked in FY19. VSF margins declined to INR18/kg (the lowest in four years). Chemicals margins also declined to INR11/kg in FY20. Significant capacity additions in both the VSF and Chemicals industries led to a sharp contraction in margins in FY20. Given the high capacity in the industry and the COVID-19 impact on demand, industry utilization is likely to remain low; we expect margins to remain weak over the next two years.

Also, higher depreciation and interest cost are likely to result in weak standalone RoE of 2 % in the next two years.

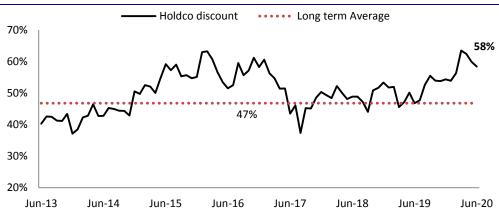
Exhibit 5: Trend in VSF and Chemicals margins

			_										
	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21E	FY21E
VSF EBITDA/kg	39.0	44.1	34.3	25.1	17.1	9.3	17.6	26.7	29.2	29.9	18.1	16.3	19.6
Chemical EBITDA/kg	7.6	6.8	7.5	11.9	9.2	16.0	8.9	10.9	15.1	18.2	10.9	6.6	8.2

Source: MOFSL, Company

Given Grasim's conglomerate business structure, we value it on an SOTP basis. Our target price values: a) the standalone businesses (Fiber, Chemicals, etc.) at 6x FY22E EV/EBITDA, b) UltraTech at a 60% holding company discount to the target price, and c) other listed investments (AB Capital, Vodafone Idea, Hindalco, and Aditya Birla Fashion) at a 60% holding company discount to market prices. Thus, we arrive at a fair value of INR630. Maintain **Neutral**.

Exhibit 6: Holdco discount elevated at 58%



Source: MOFSL, Company

Financials and valuations

Standalone Income Statement								(INR m)
Y/E March	2015	2016	2017	2018	2019	2020	2021E	2022E
Net Sales	63,420	89,692	1,03,457	1,57,858	2,05,504	1,86,094	1,61,353	1,86,213
Change (%)	12.9	41.4	15.3	52.6	30.2	-9.4	-13.3	15.4
Total Expenditure	56,676	74,766	81,909	1,27,083	1,64,793	1,62,989	1,44,533	1,63,513
EBITDA	6,744	14,927	21,548	30,775	40,712	23,105	16,819	22,700
Change (%)	-22.9	121.3	44.4	42.8	32.3	-43.2	-27.2	35.0
Margin (%)	10.6	16.6	20.8	19.5	19.8	12.4	10.4	12.2
Depreciation	2,626	4,449	4,461	6,277	7,604	8,468	9,928	11,728
EBIT	4,118	10,478	17,086	24,499	33,108	14,638	6,891	10,972
Int. and Finance Charges	393	1,474	576	1,281	1,991	3,039	3,898	5,095
Other Income - Rec.	3,387	3,585	4,739	4,614	5,680	5,255	5,149	6,139
PBT & EO Items	7,112	12,588	21,249	27,831	36,797	16,854	8,143	12,017
Change (%)	-27.8	77.0	68.8	31.0	32.2	-54.2	-51.7	47.6
Extra Ordinary Income	-262	-292	08.8	-2,726	-23,680	-2,941	-51.7	0
•								
PBT but after EO Items	6,849	12,297	21,249	25,105	13,117	13,913	8,143	12,017
Tax	1,550	2,590	5,649	7,446	7,964	1,214	1,759	2,750
Tax Rate (%)	22.6	21.1	26.6	29.7	60.7	8.7	21.6	22.9
Reported PAT	5,299	9,706	15,600	17,659	5,153	12,699	6,384	9,267
PAT Adj for EO items	5,561	9,998	15,600	20,385	28,833	12,625	6,384	9,267
Change (%)	-37.9	79.8	56.0	30.7	41.4	-56.2	-49.4	45.2
Margin (%)	8.8	11.1	15.1	12.9	14.0	6.8	4.0	5.0
Standalone Balance Sheet								(INR m)
Y/E March	2015	2016	2017	2018	2019	2020	2021E	2022E
Equity Share Capital	919	934	934	1,315	1,315	1,315	1,315	1,315
Reserves	1,10,911	1,37,785	1,61,376	4,46,584	4,18,277	3,75,425	3,79,178	3,85,814
Revaluation Reserves	0	0	0	0	0	0	0	0
Net Worth	1,11,829	1,38,718	1,62,310	4,47,898	4,19,592	3,76,740	3,80,493	3,87,129
Loans	11,150	16,152	7,015	25,825	29,036	50,681	60,681	75,181
Deferred liabilities	6,145	4,941	6,630	18,350	18,789	14,025	14,025	14,025
Capital Employed	1,29,124	1,59,811	1,75,954	4,92,073	4,67,417	4,41,446	4,55,200	4,76,336
Gross Block	73,337	77,947	81,549	1,27,316	1,38,501	1,55,466	1,75,466	2,15,466
Less: Accum. Deprn.	21,461	8,316	12,681	19,125	26,166	34,634	44,562	56,290
Net Fixed Assets	51,875	69,631	68,868	1,08,191	1,12,335	1,20,832	1,30,904	1,59,176
Capital WIP	5,221	3,177	3,755	7,451	15,672	27,919	22,919	12,919
Non Current Investments /Strategic	42,843	58,869	74,241	3,35,867	2,81,616	2,56,621	2,56,621	2,56,621
Current - Financial	10,661	12,127	15,723	19,599	29,660	20,141	20,141	20,141
Curr. Assets	33,052	34,161	35,924	66,067	78,850	69,433	72,818	78,743
Inventory	14,332	16,054	17,327	25,917	29,317	26,262	22,955	26,537
Account Receivables	6,875	9,924	11,896	26,093	34,841	29,053	27,280	31,537
Cash and Bank Balance	532	350	527	419	425	789	9,254	7,340
Others	11,314	7,833	6,174	13,639	14,268	13,328	13,328	13,328
Curr. Liability & Prov.	14,528	18,152	22,557	45,103	50,715	53,499	48,203	51,264
Account Payables	8,273	5,932	11,259	22,534	23,738	26,648	20,820	23,554
Provisions	5,034	1,702	1,626	5,087	4,614	5,514	6,094	6,422
Other Liabilities	1,222	10,518	9,672	17,481	22,363	21,337	21,288	21,288
Net Current Assets	18,524	16,008	13,367	20,965	28,134	15,934	24,615	27,479

E: MOFSL Estimates

Appl. of Funds

14 June 2020 6

1,75,955

4,92,073

4,67,417

4,41,447

4,55,200

4,76,336

1,29,124

1,59,811

Financials and valuations

Standalone Ratios								(INR m)
Y/E March	2015	2016	2017	2018	2019	2020	2021E	2022E
Share price								
EPS	60.5	107.1	167.1	31.0	43.8	19.2	9.7	14.1
Cash EPS	89.1	154.8	214.9	202.8	277.0	160.4	124.0	159.6
BV/Share	243.5	297.2	347.7	681.4	638.1	572.9	578.6	588.7
DPS	3.6	3.6	5.5	6.2	7.0	0.0	4.0	4.0
Valuation								
P/E					13.7	31.4	62.0	42.7
PEG (x)					0.3	-0.6	-1.3	0.9
Cash P/E					2.2	3.8	4.9	3.8
P/BV					0.9	1.1	1.0	1.0
EV/Sales					0.1	0.2	0.2	0.3
EV/EBITDA					9.8	18.4	25.4	19.6
Dividend Yield (%)					1.2	0.0	0.7	0.7
Return Ratios (%)								
RoE	5.0	7.2	9.6	4.6	6.9	3.4	1.7	2.4
RoCE	6.1	9.1	12.9	6.1	8.6	4.7	2.7	3.7
ROIC	2.6	6.0	7.8	5.4	2.8	3.0	1.3	1.9
Working Capital Ratios								
Debtor (Days)	40	40	42	60	62	57	62	62
Asset Turnover (x)	0.5	0.6	0.6	0.3	0.4	0.4	0.4	0.4
Leverage Ratio								
Debt/Equity	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2
Standalone Cash Flow Statement								(INR m)
Y/E March	2015	2016	2017	2018	2019	2020	2021E	2022E
OP/(Loss) before Tax	6,849	12,297	21,249	25,131	13,117	13,913	8,145	12,019
Depreciation	2,626	4,449	4,461	6,277	7,604	8,468	9,928	11,728
Interest & Finance Charges	180	930	-591	701	941	2,604	3,898	5,095
Direct Taxes Paid	-1,294	-3,212	-2,210	-5,233	-5,123	-2,154	-1,760	-2,751
(Inc)/Dec in WC	-1,338	571	2,802	-2,796	-10,752	12,855	-167	-4,778
CF from Operations	7,023	15,034	25,712	24,080	5,788	35,686	20,045	21,313
Others	-2,547	-1,628	-3,118	-551	19,767	-501	20,043	21,313
CF from Operating incl EO	4,476	13,407	22,593	23,529	25,555	35,185	20,045	21,313
(Inc)/Dec in FA	-4,685	-6,405	-4,217	-10,521	-20,384	-27,032	-15,000	-30,000
Free Cash Flow	-4,083 - 208	7,002	18,376	13,007	5,171	8,153	5,045	-8,68 7
(Pur)/Sale of Investments	3,928	-3,221	-7,674	-1,850	-1,488	18,104	0	0
Others	1,031	2,667	3,512	-6,754	-1,488	-36,033	0	0
CF from Investments	275	-6,958	-8,378	-0,754 - 19,125	-22,559	-30,033 - 44,961	-15,000	-30,000
Issue of Shares	41	53	26	23	86	90	-13,000	-30,000
Inc/(Dec) in Debt Interest Paid	-1,871 -648	-3,275 -1,577	-11,322 -597	942	3,504 -2,050	17,475 -2,103	10,000 -3,898	14,500 -5,095
Dividend Paid	-1,929	-1,774	-2,037	-3,660	-4,050			-2,631
Others	-1,929 -75	-1,774	-2,037	-3,660	-4,030	-4,598 -725	-2,631 0	-2,631
CF from Fin. Activity	-4,482	-6,6 31			-481 - 2,990			
			-14,038	-4,512	-2,990 7	10,140	3,472	6,775
Inc/Dec of Cash Opening Balance	269	-182	177	-109		364	8,516	-1,912
	263	532	350	527	418	425	789	9,306
Closing Balance	532	350	527	418	425	789	9,306	7,393

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 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 (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at http://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 website at https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx

A graph of daily closing prices of securities is available at 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.

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

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
- 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

14 June 2020

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

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: INA000007100; 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 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.