

Estimate change



TP change



Rating change



Bloomberg	VOLT IN
Equity Shares (m)	331
M.Cap.(INRb)/(USDb)	261.9 / 3.4
52-Week Range (INR)	803 / 428
1, 6, 12 Rel. Per (%)	10/39/8
12M Avg Val (INR M)	1301

Financials & Valuations (INR b)

Y/E Mar	2020	2021E	2022E
Sales	76.6	69.8	88.8
EBITDA	6.9	5.1	7.6
PAT	5.5	4.3	6.2
EBITDA (%)	9.0	7.3	8.5
EPS (INR)	16.7	13.1	18.7
EPS Gr. (%)	6.5	(21.9)	43.3
BV/Sh. (INR)	129.4	138.5	151.6

Ratios

Net D/E	(0.0)	0.0	(0.1)
RoE (%)	12.9	9.4	12.3
RoCE (%)	14.1	10.3	13.8
Payout (%)	31.5	30.0	30.0

Valuations

P/E (x)	47.3	60.6	42.3
P/BV (x)	6.1	5.7	5.2
EV/EBITDA (x)	38.0	51.9	34.1
Div Yield (%)	0.5	0.4	0.6
FCF Yield (%)	1.6	0.0	3.0

Shareholding pattern (%)

As On	Sep-20	Jun-20	Sep-19
Promoter	30.3	30.3	30.3
DII	39.2	39.3	39.5
FII	12.4	10.7	10.2
Others	18.0	19.7	20.1

FII Includes depository receipts

CMP: INR791 TP: INR775 (-2%) Downgrade to Neutral

Strong franchise, but risk-reward no longer attractive

EMP business a challenge, UCP performance already priced in

- Voltas' (VOLT) 2QFY21 earnings were 37% better than our expectation, largely led by better-than-expected execution in the EMP segment and higher margins in the UCP segment. VOLT has sustained its no.1 position in Room Air conditioners (RAC) and further improved its market share to 26.8% in Aug'20 (YTD 26.4%). Inventory level with the company stood at ~110 days, which is higher than normal, but should normalize by Dec'20-Jan'21.
- On the recent restructuring of business announcement, management was clear that the exercise is not aimed at selling off/demerger of the projects business. The objective was to provide adequate management bandwidth across both businesses (UCP and EMPS).
- We believe the stock's recent market price adequately factors in the franchise strength of the UCP business. We note that large part of the margin surprise is due to cut in ad spends and low cost inventory procured last year. Higher AC inventory (delayed channel filling due to the ongoing summer season) and input cost inflation could slightly pressurize margins. At CMP, the UCP business is trading at FY22/FY23E P/E of 49x/43x. We downgrade the stock to Neutral, with TP of INR775 (prior: INR710). VOLT remains our preferred play in the underpenetrated AC industry in India. We await a better entry point for the stock.

Strong operating performance led by revenue surprise

- **2QFY21:** Consolidated revenue increased 13% to INR16b and was **22% ahead of expectations**. EBITDA declined 8% to INR980m and was 53% above expectations. Other income declined 47% YoY to INR383m. Loss from associates/JVs came in at INR84m (v/s est. INR160m loss). Adj. PAT declined 29% to INR784m and was 37% ahead of our expectations.
- **Segmental highlights: (a) EMP:** Revenue increased 15% to INR9.3b and was 24% ahead of expectations. PBIT margins came in at 2.5% (v/s est. 2%). The company took provisions toward legacy projects. Order book stood at INR68b (+4% YoY, -11% QoQ). **(b) UCP:** Revenue increased 9% YoY to INR5.7b (14% ahead of expectations). PBIT margins came in at 11% (+220bp) v/s expectation of 10%. Overall volume growth of 14% saw contribution of 11% in RAC, 20% in Commercial Refrigeration Products and 28% in Air Coolers. **Net capital employed in UCP segment remained high** at INR9.3b (2QFY20: INR2.8b; 1QFY21: INR7.3b), on account of high inventory levels.

Key takeaways from management commentary

- **UCP:** In 1HFY21, the AC industry declined 59% YoY. E-commerce formed just 5% of sales in 2QFY21. AC requires installation, and hence, has lower penetration in e-commerce, relative to other categories. Inventory level with the company stood at ~110 days.
- **EMPS:** Clients are still deferring payments, and hence, management has taken ECL provisions. VOLT expects margins to gradually recover to 5-6%, and it might remain under pressure in the near term.
- **Volt-Bek:** Though losses were lower in 2QFY21, there might be a need for further infusion toward marketing spends in the coming years.

Nilesh Bhaiya – Research Analyst (Nilesh.Bhaiya@MotilalOswal.com)

Pratik Singh – Research Analyst (Pratik.Singh@MotilalOswal.com)

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

Motilal Oswal research is available on www.motilaloswal.com/Institutional-Equities, Bloomberg, Thomson Reuters, Factset and S&P Capital.

- **Business restructuring:** The company announced restructuring of large part of the projects business, by moving it from standalone entity to 100% wholly-subsiary. Management is clear that this exercise is not aimed at selling off/demerger of the projects business. The objective is to provide adequate management bandwidth across both businesses (UCP and EMPS).

Valuation and view

We believe the recent market price adequately factors in the franchise strength of the UCP business. We note that large part of margin surprise is on account of cut in ad-spends as well as low cost inventory procured last year. Higher AC inventory could mean delayed channel filling going into the summer season. Further, input cost inflation could some what pressurize margins. At CMP, the UCP business is trading at FY22/FY23E P/E of 49x/43x. We downgrade the stock to Neutral, with TP of INR775 (prior: INR710). VOLT remains our preferred play in the underpenetrated AC industry in India. We await a better entry point for the stock.

Quarterly Performance

Y/E March	(INR M)											Var. Vs Est
	FY20				FY21E				FY20	FY21E	FY21	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			2QE	
Sales	26,540	14,219	14,925	20,896	12,969	16,125	16,415	24,290	76,581	69,800	13,265	22%
Change (%)	23.6	0.0	0.0	1.3	-51.1	13.4	10.0	16.2	7.5	-8.9	-6.7	
EBITDA	2,912	1,059	976	1,920	668	980	1,022	2,404	6,867	5,074	639	53%
Change (%)	19.7	-2.5	-15.7	33.1	-77.1	-7.5	4.8	25.2	12.3	-26.1	-39.6	
As of % Sales	11.0	7.4	6.5	9.2	5.1	6.1	6.2	9.9	9.0	7.3	4.8	
Depreciation	77	80	80	82	82	84	90	97	320	353	90	
Interest	44	49	57	61	67	58	60	65	211	250	70	
Other Income	433	726	543	605	674	383	500	543	2,306	2,100	500	
Extra-ordinary Items	-301	-43	0	-20	0	0	0	0	-364	0	0	
PBT	2,923	1,612	1,381	2,362	1,192	1,221	1,372	2,786	8,278	6,570	979	25%
Tax	1,046	448	314	572	258	353	345	697	2,380	1,654	246	
Effective Tax Rate (%)	32.4	27.1	22.7	24.0	21.6	28.9	25.2	25.0	27.5	25.2	25.2	
Share of profit of associates/JV's	(225)	(100)	(198)	(203)	(123)	(84)	(160)	(229)	(726)	(596)	(160)	
Reported PAT	1,652	1,064	869	1,587	812	784	867	1,859	5,172	4,321	573	37%
Change (%)	-10.2	2.9	7.4	13.6	-50.9	-26.4	-0.3	17.2	1.8	-16.4	-46.2	
Adj PAT	1,953	1,107	869	1,607	812	784	867	1,859	5,536	4,321	573	37%
Change (%)	6.2	7.0	-6.2	15.1	-58.4	-29.2	-0.3	15.7	6.5	-21.9	-48.3	

Exhibit 1: Operating matrix

INR M	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Order Book	39,140	43,210	50,620	49,760	77,880	64,880	59,880	64,514
YoY	0.5%	10.4%	17.1%	-1.7%	56.5%	-16.7%	-7.7%	7.7%
Order Inflows	28,498	30,620	35,862	35,331	60,581	20,000	35,000	45,000
Segmental Revenues								
Electro mechanical projects	28,288	26,550	28,452	36,191	32,461	33,000	40,000	40,366
Engineering Products	3,706	3,318	3,099	3,117	3,317	3,200	3,200	3,200
Unitary Cooling products	25,209	30,469	32,261	31,555	40,737	33,000	45,000	51,750
Others	263	613	466	378	66	600	600	600
Total Revenues	57,466	60,950	64,279	71,241	76,581	69,800	88,800	95,916
EMP, % YoY	28.1%	-6.1%	7.2%	27.2%	-10.3%	1.7%	21.2%	0.9%
Engg Products, % YoY	2.9%	-10.5%	-6.6%	0.6%	6.4%	-3.5%	0.0%	0.0%
UCP, % YoY	0.4%	20.9%	5.9%	-2.2%	29.1%	-19.0%	36.4%	15.0%
Segmental PBIT								
Electromechanical projects	550	849	1,854	2,773	1,704	330	2,000	2,018
Engineering Products	1,127	956	992	1,051	993	1,024	992	992
Unitary Cooling products	3,381	4,403	4,749	3,254	5,121	4,455	5,400	6,210
Total PBIT	5,058	6,208	7,595	7,077	7,817	5,809	8,392	9,220
Segmental PBIT, %								
Electromechanical projects	1.9	3.2	6.5	7.7	5.2	1.0	5.0	5.0
Engineering Products	30.4	28.8	32.0	33.7	29.9	32.0	31.0	31.0
Unitary Cooling products	13.4	14.5	14.7	10.3	12.6	13.5	12.0	12.0
Total PBIT	8.8	10.3	11.9	9.9	10.2	8.3	9.5	9.6
EPS (INR/sh)	10.8	15.6	17.3	15.7	16.7	13.1	18.7	21.0
NWC (Days)	40.8	35.5	42.0	66.3	67.0	97.7	71.1	71.1
EPS Composition (INR/sh)	10.8	15.6	17.3	15.7	16.7	13.1	18.7	21.0
Electromechanical projects	0.0	2.5	3.6	6.8	4.3	1.2	5.1	5.1
Engineering Products	2.6	2.2	2.2	2.4	2.2	2.3	2.2	2.2
Unitary Cooling products	8.1	11.5	11.4	8.1	12.4	11.2	13.4	15.2
Voltas Beko JV	0.2	-0.6	0.1	-1.6	-2.1	-1.7	-2.0	-1.6

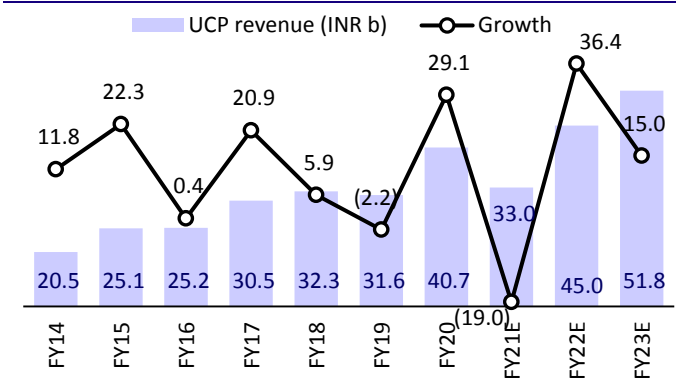
Source: MOFSL, Company

Exhibit 2: We value VOLT at INR775/share

Name of segment	Sep'22 EPS (INR)	Multiple (x)	Value/sh (INR)
Unitary Cooling Products	14.4	45.0	642
Engineered Products Services	2.2	15.0	34
Electro Mechanical Products(incl. non-allocable)	5.1	10.0	51
BEKO JV	(1.8)	DCF	50
Total	19.9		775

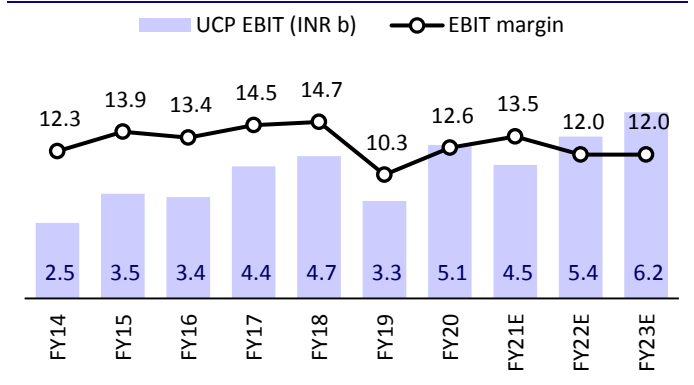
Source: MOFSL, Company

Exhibit 3: UCP sales expected at 8.3% CAGR over FY20–23E



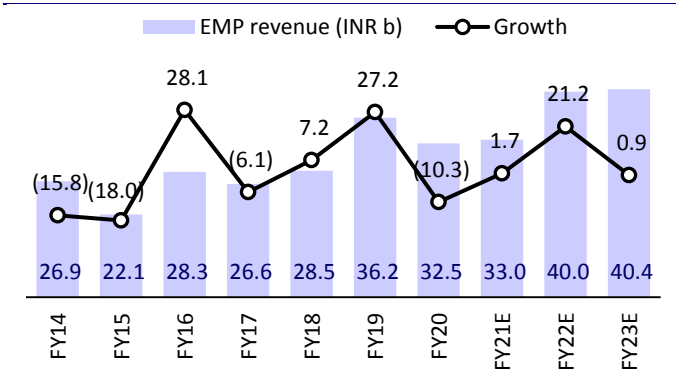
Source: MOFSL, Company

Exhibit 4: Margins to moderate over FY22–23E



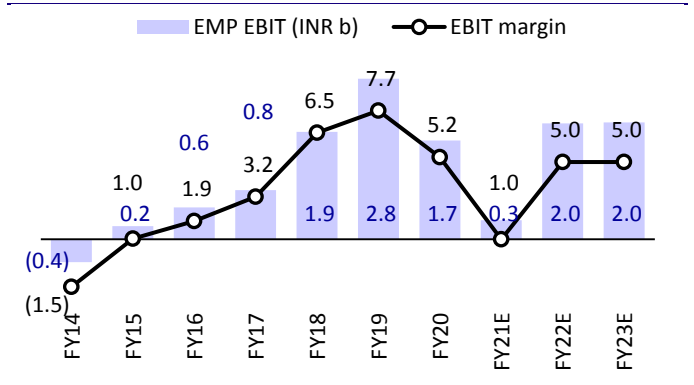
Source: MOFSL, Company

Exhibit 5: EMP sales expected at 7.5% CAGR over FY20–23E



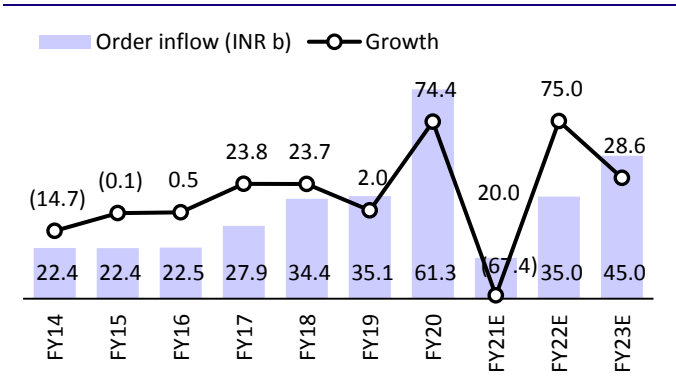
Source: MOFSL, Company

Exhibit 6: Margins to stabilize in FY22E post normalization of construction activity



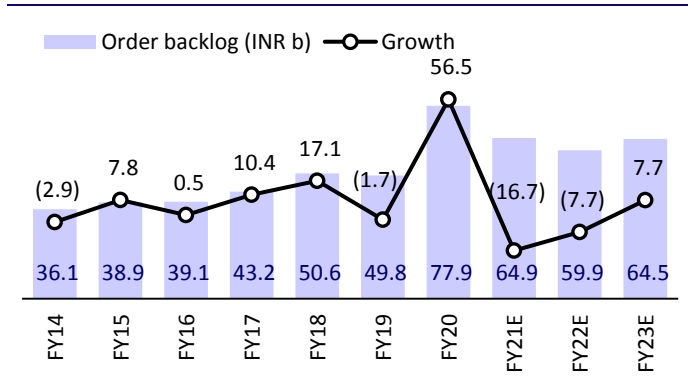
Source: MOFSL, Company

Exhibit 7: Order inflows should moderate to ~INR35b in FY22E after sharp drop in FY21E



Source: MOFSL, Company

Exhibit 8: Order book should remain flat over FY21–23E as the VOLT focuses on execution



Source: MOFSL, Company



Management commentary highlights

Unitary Cooling Products

- 1HFY21 AC industry sales declined 59%.
- 2QFY21 AC volumes grew 11% for VOLT, while inverter AC volumes grew 36%.
- **Market share in ACs stood at 26.8% in Aug'20 (v/s 26.4% YTD).**
- Lower material costs and sensible marketing spends led to margin expansion.
- Volume growth stood at 20% in Commercial Refrigeration Products and 28% in Air Coolers.
- e-commerce formed just 5% of sales in 2QFY21. AC requires installation, and hence, the lower penetration is relative to some other categories in e-commerce.
- **Currently, VOLT has INR10b of inventory, translating to ~110 days.**
- There were hardly any ad spends in 1HFY21 as there was no point in advertising in such a market where the COVID pandemic was rampant.

Electromechanical Projects and Services

- The company took ECL related provisions in 2FY21, especially in the Middle East, which impacted profitability.
- Pace of execution was better in the Middle East in some projects due to better availability of labor and government support. However, few legacy orders saw delays.
- **Management is witnessing deferment of payments by clients, and hence, ECL provisions were undertaken.**
- Overall, order book stood at INR68.5b. Of this, international order book stood at INR23.2b.
- **Management expects gradual margin recovery to 5-6%; however, it may remain under pressure in the near term.**

Volt-Bek

- Seeing encouraging feedback on products launched.
- Ramping up production in Sanand factory.
- Production of Frost-free Refs and Top-loads WMs would also be undertaken in the near future.
- Have 6,000 touch points now.
- Lower losses in 2QFY21; however, there may be a need to infuse more marketing spends in the coming years as focus is on expanding market share.

Restructuring:

- Management has clarified that they do not plan to sell the B2B business as of now. This is an internal restructuring to focus more on the B2C business.
- **This exercise should not be seen as a precursor to demerger. The company had options to demerge directly as well, if that had been the plan.**
- There will be a project-specific management team looking at the B2B business now.

Other takeaways

- Other income declined owing to MTM.

- Ban on refrigerant ACs will impact fringe players and help in market consolidation. VOLT has reduced imports over the years; the company believes imports of components will be substituted over the next 2-3 years. VOLT is an industry leader and strong anchor customer for suppliers.
- **VOLT's imports:** CBU imports is quite low and limited to select SKUs. IDU imports were at 70-80% a couple of years back, but have gradually reduced.
- Management is planning to set up an AC factory in South India.
- Festive season: The company has launched an attractive financing scheme (higher product warranties are being offered).

Valuation and view

- **Market leadership in Air Conditioner segment:** VOLT has consistently maintained its market leadership in the RAC market despite rising competitive intensity. Over Jan–Feb'20, the company emerged as the market leader in Inverter ACs as well. With strong distribution network and less reliance on imports, we expect VOLT to continue its leadership position in the RAC market.
- **Volt-Bek offers meaningful increase in addressable market size:** The move to form a JV with the Beko brand to cater to a wider audience in the Consumer Durables space (beyond ACs) has come at the right time. While management has high ambitions of gaining 10% market share through Volt-Bek and generating INR100b in revenues by FY25E, we factor in modest assumptions and expect FY25E revenues at INR40b (40% of management's ambitious target), ascribing INR50/share of attributable valuation to the stock.
- **Downgrade to Neutral:** We believe the recent market price adequately factors in the franchise strength of the UCP business. We note that large part of the margin surprise is on account of cut in ad-spends as well as low cost inventory procured last year. Higher AC inventory could mean delayed channel filling going into the summer season this time. Also, input cost inflation could put some pressure on margins. At CMP, the UCP business is trading at FY22/FY23E P/E of 49x/43x. We downgrade the stock to Neutral, with TP of INR775 (prior: INR710). VOLT remains our preferred play in the underpenetrated AC industry in India and we await a better entry point for the stock.

Exhibit 9: Earnings change summary

Earnings Change INR m	Old			New			Change		
	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Revenue	66,500	88,000	95,732	69,800	88,800	95,916	5%	1%	0%
EBITDA	4,588	7,566	8,490	5,074	7,592	8,260	11%	0%	-3%
EBITDA margin	6.9%	8.6%	8.9%	7.3%	8.5%	8.6%	0.4%	0.0%	-0.3%
Adj. PAT	3,922	6,124	6,950	4,321	6,194	6,941	10%	1%	0%

Source: MOFSL, Company

Financials and valuations

Income Statement						(INR m)
Y/E March	2018	2019	2020	2021E	2022E	2023E
Total Revenues	64,044	71,241	76,581	69,800	88,800	95,916
Change (%)	6.2	11.2	7.5	-8.9	27.2	8.0
EBITDA	6,626	6,117	6,867	5,074	7,592	8,260
% of Total Revenues	10.3	8.6	9.0	7.3	8.5	8.6
Other income	1,741	1,863	2,306	2,100	2,200	2,400
Depreciation	244	240	320	353	396	444
Interest	119	330	211	250	200	200
Exceptional items	6	-118	-364	0	0	0
PBT	8,011	7,292	8,278	6,570	9,195	10,016
Tax	2,270	1,635	2,380	1,654	2,314	2,521
Rate (%)	28.3	22.4	28.8	25.2	25.2	25.2
Reported PAT	5,724	5,079	5,172	4,321	6,194	6,941
Change (%)	10.6	-11.3	1.8	-16.4	43.3	12.1
Adjusted PAT	5,718	5,197	5,536	4,321	6,194	6,941
Change (%)	10.7	-9.1	6.5	-21.9	43.3	12.1
Balance Sheet						(INR m)
Y/E March	2018	2019	2020	2021E	2022E	2023E
Share Capital	331	331	331	331	331	331
Reserves	38,721	40,769	42,471	45,496	49,832	54,690
Net Worth	39,052	41,100	42,802	45,827	50,163	55,021
Minority interest	317	348	365	404	442	481
Loans	1,423	3,147	2,179	4,179	1,179	179
Deferred Tax Liability	-46	-993	-715	-715	-715	-715
Capital Employed	40,746	43,601	44,631	49,694	51,069	54,966
Gross Fixed Assets	5,187	5,591	6,201	7,001	8,001	9,001
Less: Depreciation	3,013	2,959	3,195	3,548	3,944	4,388
Net Fixed Assets	2,174	2,633	3,006	3,453	4,057	4,613
Capital WIP	41	157	263	263	263	263
Investments	27,536	23,859	23,433	23,876	24,228	24,712
Goodwill	798	798	798	798	798	798
Curr. Assets	42,370	46,715	53,332	52,740	62,840	68,991
Inventory	8,130	10,907	14,689	15,299	17,030	18,395
Debtors	15,703	18,330	18,336	19,123	21,896	23,651
Cash & Bank Balance	2,837	3,211	3,084	2,621	4,426	5,897
Loans & Advances	1,218	116	23	21	24	26
Other Assets	14,482	14,151	17,200	15,677	19,463	21,023
Current Liab. & Prov.	32,172	30,560	36,201	31,435	41,116	44,411
Current Liabilities	21,765	23,745	26,889	22,948	30,411	32,848
Other Liabilities & provisions	10,408	6,815	9,312	8,487	10,705	11,563
Net Current Assets	10,198	16,155	17,131	21,305	21,724	24,581
Application of Funds	40,746	43,601	44,631	49,694	51,069	54,966

Financials and valuations

Ratios						
Y/E March	2018	2019	2020	2021E	2022E	2023E
Adj EPS	17.3	15.7	16.7	13.1	18.7	21.0
Cash EPS	18.0	16.4	17.7	14.1	19.9	22.3
Book Value	118.0	124.2	129.4	138.5	151.6	166.3
DPS	4.0	4.0	4.1	3.3	4.7	5.2
Payout (incl. Div. Tax.)	26.8	31.0	31.5	30.0	30.0	30.0
Valuation (x)						
P/E	45.8	50.4	47.3	60.6	42.3	37.7
Cash P/E	43.9	48.2	44.7	56.0	39.7	35.5
EV/EBITDA	39.3	42.8	38.0	51.9	34.1	31.0
EV/Sales	4.1	3.7	3.4	3.8	2.9	2.7
Price/Book Value	6.7	6.4	6.1	5.7	5.2	4.8
Dividend Yield (%)	0.5	0.5	0.5	0.4	0.6	0.7
Profitability Ratios (%)						
RoE	14.6	12.6	12.9	9.4	12.3	12.6
RoCE	14.3	13.8	14.1	10.3	13.8	13.9
RoIC	50.0	27.8	25.8	15.2	24.0	24.0
Turnover Ratios						
Debtors (Days)	89	94	87	100	90	90
Inventory (Days)	46	56	70	80	70	70
Creditors (Days)	124	122	128	120	125	125
Asset Turnover (x)	1.6	1.6	1.7	1.4	1.7	1.7
Leverage Ratio						
Net Debt/Equity (x)	0.0	0.0	0.0	0.0	-0.1	-0.1

Cash Flow Statement						(INR m)
Y/E March	2018	2019	2020	2021E	2022E	2023E
PBT before EO Items	8,005	6,774	7,591	6,570	9,195	10,016
Depreciation	268	240	320	353	396	444
Interest & other	0	330	211	250	200	200
Direct Taxes Paid	-2,270	-2,708	-2,061	-1,654	-2,314	-2,521
(Inc)/Dec in WC	-1,495	-6,456	-911	-4,637	1,386	-1,386
CF from Operations	4,508	-1,820	5,150	883	8,863	6,753
(Inc)/Dec in FA	-252	-818	-905	-800	-1,000	-1,000
Free Cash Flow	4,257	-2,638	4,245	83	7,863	5,753
(Pur)/Sale of Investments	-4,857	3,181	-1,549	-1,000	-1,000	-1,000
CF from Investments	-5,109	2,364	-2,454	-1,800	-2,000	-2,000
(Inc)/Dec in Debt	1,666	1,724	-1,057	2,000	-3,000	-1,000
Interest Paid	0	-329	-212	-250	-200	-200
Dividend Paid	-1,534	-1,577	-1,627	-1,296	-1,858	-2,082
CF from Fin. Activity	132	-183	-2,896	454	-5,058	-3,282
Inc/Dec of Cash	-469	361	-200	-463	1,805	1,471
Add: Beginning Balance	3,305	2,837	3,198	2,998	2,535	4,340
Closing Balance	2,837	3,198	2,998	2,535	4,340	5,811

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, www.bseindia.com. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act") and together with the 1934 Act, the "Acts), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets Singapore Pte Ltd ("MOCMSPL") (Co.Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore. As per the approved agreement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of First Schedule of Financial Advisors Act (CAP 110) provided to MOCMSPL by Monetary Authority of Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act, Chapter 289 of Singapore ("the SFA"). Accordingly, if a Singapore person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform MOCMSPL.

Specific Disclosures

- 1 MOFSL, Research Analyst and/or his relatives does not have financial interest in the subject company, as they do not have equity holdings in the subject company.
- 2 MOFSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
- 3 MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- 4 MOFSL, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication of research report
- 5 Research Analyst has not served as director/officer/employee in the subject company
- 6 MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 7 MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- 8 MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- 9 MOFSL has not received any compensation or other benefits from third party in connection with the research report
- 10 MOFSL has not engaged in market making activity for the subject company

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company
- 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.: INP00000670); 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.