

BSE SENSEX  
44,655

S&P CNX  
13,109



#### Stock Info

Bloomberg	NMDC IN
Equity Shares (m)	3,062
M.Cap.(INRb)/(USDb)	260 / 3.4
52-Week Range (INR)	140 / 62
1, 6, 12 Rel. Per (%)	-2/-14/-21
12M Avg Val (INR M)	744
Free float (%)	30.4

#### Financials & Valuations (INR b)

Y/E MARCH	2020	2021E	2022E
Sales	117.0	130.4	152.6
EBITDA	62.2	68.6	76.5
Adj. PAT	46.9	50.6	56.6
EBITDA Margin (%)	53.2	52.6	50.1
Cons. Adj. EPS (INR)	15.3	16.5	18.5
EPS Gr. (%)	-1.9	7.9	11.8
BV/Sh. (INR)	89.9	100.5	112.9

#### Ratios

Net D:E	-0.1	-0.1	-0.1
RoE (%)	17.5	17.4	17.3
RoCE (%)	15.5	16.7	16.8
Payout (%)	54.0	36.3	32.5

#### Valuations

P/E (x)	6.5	6.0	5.4
P/BV (x)	1.1	1.0	0.9
EV/EBITDA(x)	4.6	3.9	3.5
Div. Yield (%)	5.3	6.0	6.0

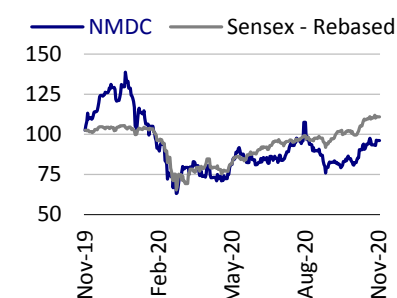
Note: Above nos. are consol.

#### Shareholding pattern (%)

As On	Sep-20	Jun-20	Sep-19
Promoter	69.7	69.7	72.3
DII	20.5	20.4	17.9
FII	4.5	5.4	5.3
Others	5.4	4.6	4.6

FII Includes depository receipts

#### Stock Performance (1-year)



CMP: INR99

TP: INR129 (+30%)

Buy

## Earnings outlook strengthens further

### Reiterate Buy on valuations despite risk of higher levies

NMDC's volume outlook has strengthened further with the resumption of Donimalai mine expected by December-end. Strong volume trend (sales of 3.3mt in Nov'20, up 18% YoY), coupled with strong iron ore pricing (hike of INR500/t in Dec-20), should drive near-term earnings. Resumption of the Donimalai mine should drive 11% EBITDA growth in FY22E on the back of a 18% volume growth. We reiterate our Buy on NMDC with a TP of INR129/share on valuation support despite the risk of government levies.

### Donimalai lease renewal with additional levy raises uncertainty on earnings

- The Ministry of Mines has approved the premium levy (22.5%) on Donimalai mine, temporarily over-riding the MMDR Act, 2015 to address the shortage of iron ore supply. However, the final premium would be decided by a committee that would review Mineral (Mining by Government Company) Rules, 2015.
- Earlier in Sep'20, the Karnataka government allowed NMDC to start the mine on the above terms. Post this approval, NMDC would be able to re-start operations that came to a halt in Nov'18. It would have to pay 22.5% of the IBM determined average sale price of iron ore.
- The Centre would constitute a committee to decide the premium payable by PSUs for future renewals. This implies that the renewal of 7mtpa Kumaraswamy mine, due in Oct'22, would be at a premium as decided by the Central government committee. The Chhattisgarh government could also demand a similar premium on mines, which were renewed in 2019, posing another risk.

### Valuation and view

- We expect NMDC to restart operations from the Donimalai mine by December-end and accordingly raise our FY21E/FY22E volume estimate by ~3%/16% to 31.3mt/37mt. However, incremental EBITDA contribution from Donimalai mine would be lower due to levy of 22.5% premium. We expect EBITDA to grow ~11% CAGR over FY20-22E despite a volume/realization CAGR of 8%/~5%.
- We see NMDC as a second order beneficiary of an improving domestic steel demand and prices. NMDC has raised prices by INR500/t for Dec-20 leading to cumulative hikes of INR2,250/t over last five months. We expect 2HFY21 EBITDA to ~60% higher YoY at INR50.8b on strong pricing.
- The government's proposal to levy a premium on NMDC on its mining leases has emerged as a key overhang on the stock. If a premium of 22.5% of revenue is levied on all of NMDC's mines, it poses a downside risk of ~25% to our FY22E EBITDA.
- We value the stock at INR129/share on a SoTP basis – 4x FY22E EV/EBITDA for its core iron ore mining business and ~25% book value for the Nagarnar plant. At the CMP, the stock is trading at 2.8x its core iron ore mining business. Reiterate **Buy** on strong earnings and valuation support.

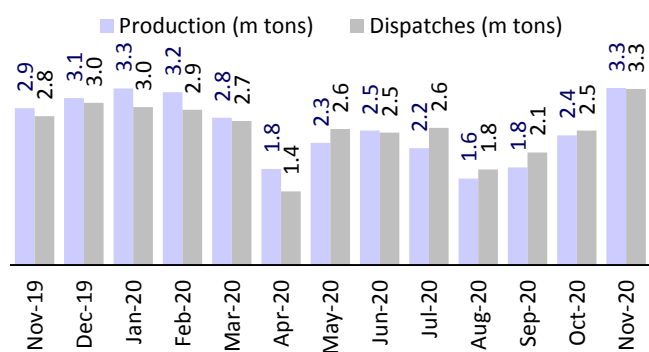
Amit Murarka – Research Analyst (Amit.Murarka@MotilalOswal.com)

Basant Joshi – Research Analyst (Basant.Joshi@MotilalOswal.com)

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

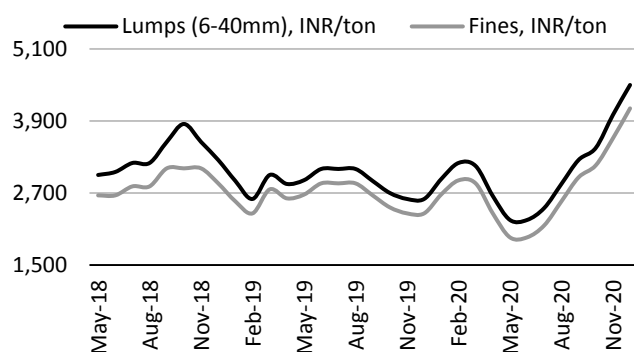
Motilal Oswal research is available on [www.motilaloswal.com/Institutional-Equities](http://www.motilaloswal.com/Institutional-Equities), Bloomberg, Thomson Reuters, Factset and S&P Capital.

Exhibit 1: Sales volumes rise by 18% YoY in Nov'20



Source: MOFSL

Exhibit 2: NMDC raises price by INR500/t for Dec-20



Source: MOFSL

Exhibit 3: Donimalai's EBITDA/t ~40%/55% lower than that of Kumaraswamy/Chhattisgarh mines

INR/t	Mine		
	Donimalai mine	Kumaraswamy	Chhattisgarh
<b>Gross realization</b>			
Base price (FY22 estimate) (1:2 lumps: fines mix)	3,200	3,200	3,200
Royalty, DMF and NMET contribution at 19.8%	634	634	634
Payable by customer	3,834	3,834	3,834
<b>Less: Deductions</b>			
Royalty and other levies payable to the government	634	634	634
Retention by Monitoring Committee (20%)	640	640	-
Premium payable at 22.5%	720	-	-
<b>Total deductions</b>	<b>1,994</b>	<b>1,274</b>	<b>634</b>
Net realization to NMDC	1,840	2,560	3,200
Average cost per tonne	750	750	750
EBITDA/t	1,090	1,810	2,450

Source: MOFSL

Exhibit 4: Change in estimates

INR m	Revised		Old		Change (%)	
	FY21E	FY22E	FY21E	FY22E	FY21E	FY22E
Iron ore volumes - mt	31.3	37.0	30.5	32.0	2.6	15.6
Blended iron ore realization (INR/t)	4,168	4,124	3,817	3,835	9.2	7.5
EBITDA/t - INR	2,193	2,066	1,946	1,993	12.7	3.7
EBITDA	68,648	76,452	59,356	63,761	15.7	19.9
Adjusted PAT	50,607	56,600	43,731	47,209	15.7	19.9
Target price (INR/share)		129		109		18.2

Source: MOFSL

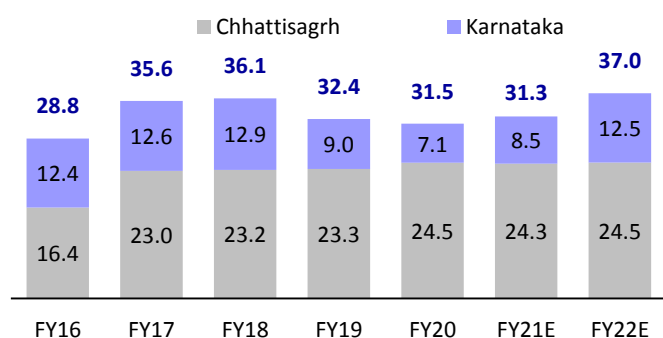
Exhibit 5: Target price derivation

Y/E March	FY17	FY18	FY19	FY20	FY21E	FY22E
<b>Iron ore</b>						
EBITDA per tonne (INR)	1,262	1,752	2,207	1,974	2,193	2,066
Volumes (mt)	35.6	36.1	32.4	31.5	31.3	37.0
<b>EBITDA</b>	<b>44,944</b>	<b>63,198</b>	<b>71,416</b>	<b>62,203</b>	<b>68,648</b>	<b>76,452</b>
Target EV/EBITDA (x)						4.0
Target EV						3,05,809
Less: Net debt				-18,268	-35,951	-39,477
Add: Nagarnar Steel Plant at 25% of BV				38,679	41,351	48,851
Equity value						3,94,138
<b>Target price (INR/share)</b>						<b>129</b>

Source: MOFSL, Company

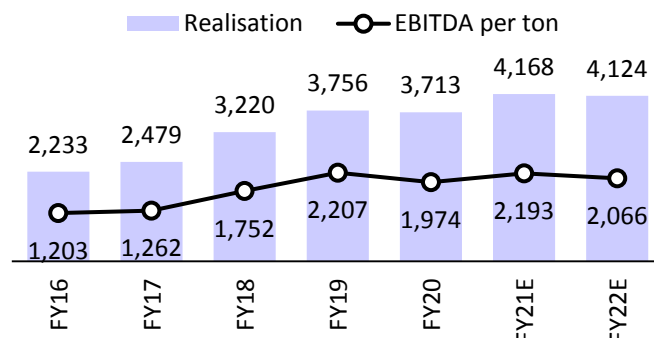
## Story in Charts

**Exhibit 6: Volumes to grow at 8% CAGR over FY20-22E**



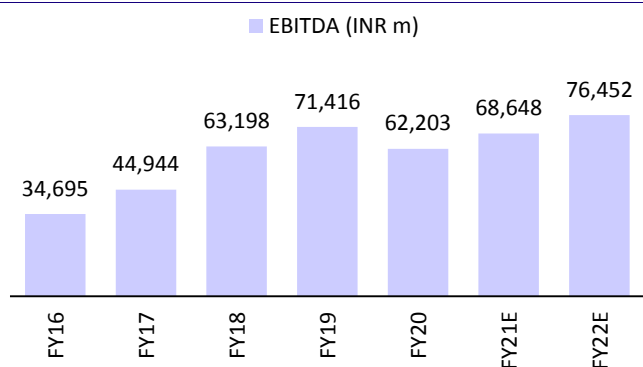
Source: Company, MOFSL

**Exhibit 7: EBITDA/t to remain strong on higher prices**



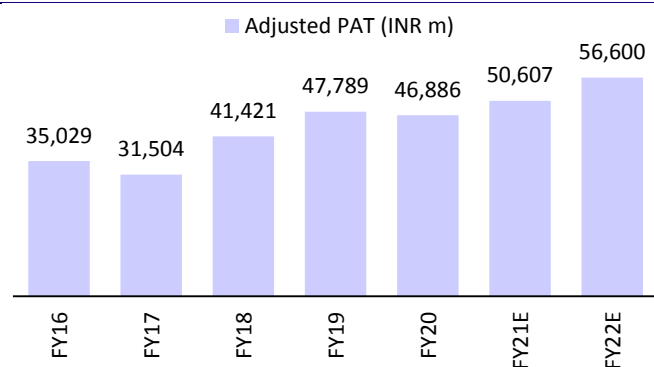
Source: Company, MOFSL

**Exhibit 8: EBITDA to grow ~11% CAGR over FY20-22E**



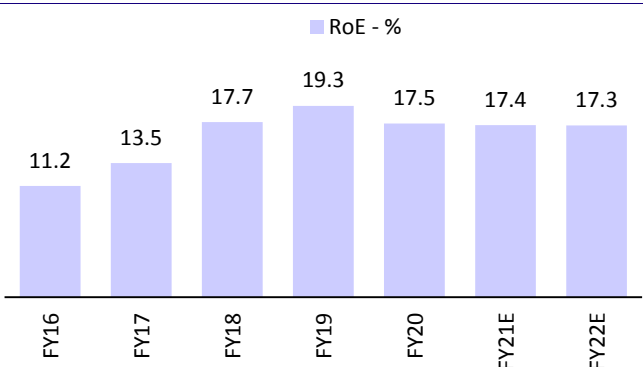
Source: Company, MOFSL

**Exhibit 9: PAT to grow ~10% CAGR over FY20-22E**



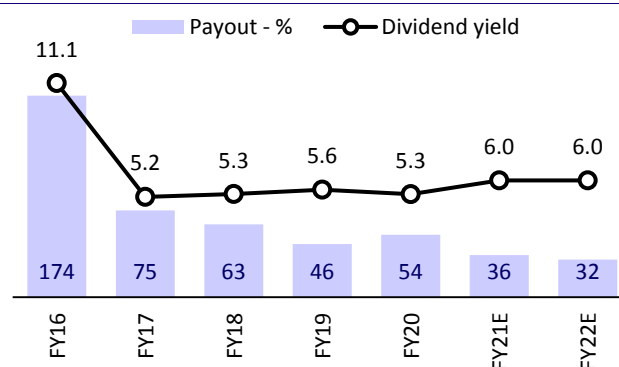
Source: Company, MOFSL

**Exhibit 10: RoE to decline over FY20-22E**



Source: MOFSL

**Exhibit 11: Dividend yield of ~6%**



Source: MOFSL

## Financials and Valuations

Income Statement							(INR m)	
Y/E March	FY15	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E
<b>Net sales</b>	<b>1,23,564</b>	<b>64,556</b>	<b>88,294</b>	<b>1,16,149</b>	<b>1,21,527</b>	<b>1,16,992</b>	<b>1,30,444</b>	<b>1,52,577</b>
Change (%)	2.5	-47.8	36.8	31.5	4.6	-3.7	11.5	17.0
<b>EBITDA</b>	<b>81,369</b>	<b>34,998</b>	<b>44,944</b>	<b>63,198</b>	<b>71,416</b>	<b>62,203</b>	<b>68,648</b>	<b>76,452</b>
% of Net Sales	65.9	54.2	50.9	54.4	58.8	53.2	52.6	50.1
EBITDA per ton ore	2,666	1,214	1,262	1,752	2,207	1,974	2,193	2,066
Depn. & Amortization	1,622	2,078	1,962	2,560	2,789	2,869	2,869	3,119
<b>EBIT</b>	<b>79,747</b>	<b>32,920</b>	<b>42,982</b>	<b>60,638</b>	<b>68,628</b>	<b>59,334</b>	<b>65,780</b>	<b>73,333</b>
Net Interest				371	403	99	403	781
Other income	23,200	17,744	9,088	5,197	5,883	5,138	3,576	3,934
<b>PBT before EO</b>	<b>1,02,946</b>	<b>50,664</b>	<b>52,070</b>	<b>65,464</b>	<b>74,107</b>	<b>64,373</b>	<b>68,953</b>	<b>76,487</b>
EO income		-1,848	-8,933	-5,309	-2,120	-10,778		
<b>PBT after EO</b>	<b>1,02,946</b>	<b>48,816</b>	<b>43,137</b>	<b>60,155</b>	<b>71,987</b>	<b>53,596</b>	<b>68,953</b>	<b>76,487</b>
Tax	33,460	14,769	17,038	22,093	25,565	17,413	18,346	19,887
Rate (%)	32.5	30.3	39.5	36.7	35.5	32.5	26.6	26.0
<b>Reported PAT</b>	<b>69,487</b>	<b>34,047</b>	<b>26,099</b>	<b>38,062</b>	<b>46,422</b>	<b>36,183</b>	<b>50,607</b>	<b>56,600</b>
<b>Adjusted PAT</b>	<b>69,487</b>	<b>35,335</b>	<b>31,504</b>	<b>41,421</b>	<b>47,789</b>	<b>46,886</b>	<b>50,607</b>	<b>56,600</b>
Change (%)	2.5	-49.1	-10.8	31.5	15.4	-1.9	7.9	11.8

Balance Sheet							(INR m)	
Y/E March	FY15	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E
Share Capital	3,965	3,965	3,164	3,164	3,062	3,062	3,062	3,062
Reserves	3,19,353	2,97,146	2,22,026	2,40,374	2,56,453	2,72,278	3,04,513	3,42,742
<b>Shareholders' funds</b>	<b>3,23,317</b>	<b>3,01,110</b>	<b>2,25,189</b>	<b>2,43,538</b>	<b>2,59,515</b>	<b>2,75,340</b>	<b>3,07,575</b>	<b>3,45,804</b>
Loans		<b>14,970</b>		<b>5,001</b>	<b>3,642</b>	<b>5,656</b>	<b>5,656</b>	<b>5,656</b>
Long-term Provisions	984	1,222	6,112	7,141	7,684	8,334	8,334	8,334
<b>Capital Employed</b>	<b>3,24,301</b>	<b>3,17,302</b>	<b>2,31,301</b>	<b>2,55,680</b>	<b>2,70,841</b>	<b>2,89,329</b>	<b>3,21,565</b>	<b>3,59,794</b>
Gross Block	29,446	37,304	39,724	49,473	52,752	58,878	63,878	68,878
Less: Accum. Deprn.	16,109	18,234	20,196	22,756	25,545	28,414	31,283	34,402
<b>Net Fixed Assets</b>	<b>13,337</b>	<b>19,070</b>	<b>19,528</b>	<b>26,717</b>	<b>27,207</b>	<b>30,464</b>	<b>32,595</b>	<b>34,476</b>
Capital WIP	77,100	97,229	1,18,314	1,25,199	1,37,925	1,54,716	1,65,406	1,95,406
Investments	5,619	6,954	7,270	7,865	9,393	9,856	9,856	9,856
<b>Curr. Assets</b>	<b>2,48,642</b>	<b>2,10,203</b>	<b>1,11,909</b>	<b>1,26,311</b>	<b>1,23,295</b>	<b>1,16,397</b>	<b>1,36,058</b>	<b>1,42,830</b>
Inventories	6,919	6,370	5,400	5,717	6,662	7,235	8,220	9,614
Sundry Debtors	17,523	18,961	10,435	14,727	14,245	22,237	23,230	25,081
Cash and Bank	1,84,431	1,47,636	52,893	54,382	46,077	23,923	41,607	45,133
Loans and Advances	39,768	37,237	43,181	51,484	56,311	63,002	63,002	63,002
<b>Curr. Liability &amp; Prov.</b>	<b>20,397</b>	<b>16,154</b>	<b>25,719</b>	<b>30,411</b>	<b>26,979</b>	<b>22,103</b>	<b>22,349</b>	<b>22,774</b>
Sundry Creditors	2,263	3,244	1,988	1,595	2,027	2,256	2,502	2,926
Other Liabilities & prov.	18,134	12,909	23,731	28,815	24,952	19,848	19,848	19,848
<b>Net Current Assets</b>	<b>2,28,245</b>	<b>1,94,050</b>	<b>86,190</b>	<b>95,900</b>	<b>96,316</b>	<b>94,294</b>	<b>1,13,709</b>	<b>1,20,056</b>
<b>Application of Funds</b>	<b>3,24,301</b>	<b>3,17,302</b>	<b>2,31,301</b>	<b>2,55,680</b>	<b>2,70,841</b>	<b>2,89,329</b>	<b>3,21,565</b>	<b>3,59,794</b>

## Financials and Valuations

### Ratios

Y/E March	FY15	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E
<b>Basic (INR)</b>								
<b>EPS</b>	<b>17.5</b>	<b>8.9</b>	<b>10.0</b>	<b>13.1</b>	<b>15.6</b>	<b>15.3</b>	<b>16.5</b>	<b>18.5</b>
Cash EPS	17.9	9.4	10.6	13.9	16.5	16.2	17.5	19.5
BV/Share	81.5	75.9	71.2	77.0	84.8	89.9	100.5	112.9
DPS	8.6	11.0	5.2	5.3	5.5	5.3	6.0	6.0
Payout (%)	42.2	172.4	74.9	62.9	45.9	54.0	36.3	32.5
<b>Valuation (x) CMP at INR 84.3</b>								
P/E					6.9	7.0	6.0	5.4
Cash P/E					6.5	6.6	5.7	5.1
P/BV					1.3	1.2	1.0	0.9
EV/EBITDA					4.0	5.0	3.9	3.5
Dividend Yield (%)					5.2	4.9	6.0	6.0
<b>Return Ratios (%)</b>								
EBITDA Margins	65.9	54.2	50.9	54.4	58.8	53.2	52.6	50.1
Net Profit Margins	56.2	54.7	35.7	35.7	39.3	40.1	38.8	37.1
RoE	22.3	11.3	13.5	17.7	19.3	17.5	17.4	17.3
RoCE	22.2	11.0	11.5	17.1	18.3	15.5	16.7	16.8
RoIC	92.6	37.4	44.0	63.4	60.8	44.9	47.0	50.7
<b>Working Capital Ratios</b>								
Fixed Asset Turnover (x)	4.2	1.7	2.2	2.3	2.3	2.0	2.0	2.2
Asset Turnover (x)	0.4	0.2	0.4	0.5	0.4	0.4	0.4	0.4
Debtor (Days)	52	50	43	46	43	69	65	60
Inventory (Days)	20	20	22	18	20	23	23	23
Creditors (Days)	7	20	8	5	6	7	7	7
<b>Leverage Ratio (x)</b>								
Current Ratio	12.2	13.0	4.4	4.2	4.6	5.3	6.1	6.3
Debt/Equity	-0.6	-0.4	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1

### Cash Flow Statement

(INR m)

Y/E March	FY15	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E
Pre-tax profit	1,02,946	48,816	43,137	60,155	71,987	53,596	68,953	76,487
Depreciation	1,622	2,078	1,962	2,560	2,789	2,944	2,869	3,119
(Inc)/Dec in Wkg. Cap.	-11,975	93	13,117	-8,676	-8,629	-21,434	-1,731	-2,822
Tax paid	-30,314	-17,373	-18,942	-23,432	-26,024	-23,047	-18,346	-19,887
Other operating activities	-7,655	-4,455	406	3,205	346	8,545		
<b>CF from Op. Activity</b>	<b>54,624</b>	<b>29,159</b>	<b>39,679</b>	<b>33,812</b>	<b>40,469</b>	<b>20,604</b>	<b>51,745</b>	<b>56,897</b>
(Inc)/Dec in FA + CWIP	-24,331	-20,242	-23,505	-20,524	-19,972	-23,990	-15,690	-35,000
(Pur)/Sale of Investments	-3,116	-1,335	-316	-2,523	7,661	17,155		
Others				6,294	(3,504)	(18,316)	-	-
<b>CF from Inv. Activity</b>	<b>-27,447</b>	<b>-21,576</b>	<b>-23,821</b>	<b>-16,753</b>	<b>-15,816</b>	<b>-25,151</b>	<b>-15,690</b>	<b>-35,000</b>
Equity raised/(repaid)			-76,078		-10,067			
Debt raised/(repaid)		14,970	-14,970	5,001	-1,359	2,014		
Dividend (incl. tax)	-29,318	-58,694	-19,553	-23,923	-21,321	-19,525	-18,371	-18,371
Other financing activities				3,721	190	77	-	-
<b>CF from Fin. Activity</b>	<b>-29,318</b>	<b>-44,379</b>	<b>-1,10,601</b>	<b>-15,570</b>	<b>-32,959</b>	<b>-17,531</b>	<b>-18,371</b>	<b>-18,371</b>
<b>(Inc)/Dec in Cash</b>	<b>-2,141</b>	<b>-36,796</b>	<b>-94,743</b>	<b>1,490</b>	<b>-8,305</b>	<b>-22,079</b>	<b>17,684</b>	<b>3,526</b>
Add: opening Balance	1,86,572	1,84,431	1,47,636	52,893	54,382	46,077	23,923	41,607
<b>Closing Balance</b>	<b>1,84,431</b>	<b>1,47,636</b>	<b>52,893</b>	<b>54,382</b>	<b>46,077</b>	<b>23,923</b>	<b>41,607</b>	<b>45,133</b>

## NOTES

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

\*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall 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](http://www.motilaloswal.com). MOFSL (erstwhile Motilal Oswal Securities Limited - MOFSL) 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](http://www.nseindia.com), [www.bseindia.com](http://www.bseindia.com). Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

#### Regional Disclosures (outside India)

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

#### For Hong Kong:

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

#### For U.S.

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

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

#### For Singapore

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

#### Specific Disclosures

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



The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company
- 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](http://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 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](mailto:na@motilaloswal.com), Contact No.:022-71881085.

\* MOFSL 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.