

India I Equities

Infrastructure Company Update

30 June 2020

J Kumar Infraprojects

Urban-focus otherwise good, but issue during Covid; retaining a Buy

While the Covid-19 impact is amply visible in J Kumar's Q4, it is only expected to be more pronounced in FY21. With an urban-focused OB lowering any hopes of a quick revival in operations (labour still wary of urban areas), H1 is likely to be a washout and H2 becomes critical for any respectable performance in FY21. The OB provides ample assurance (insulating it from any immediate awarding lull), and the balance sheet too is in shape. The return of migrant labour holds the key. The issue seems more than priced in; hence, we retain our Buy rating.

Covid'19 hitch. Of its pre-pandemic ~10,000 workers, only 20-25% is now available, and operational efficiency is pegged at ~15-20%. Additions are being made gradually as labour returns and management expects to re-build a substantial base by Jul'20. H1 is likely to be a complete washout. Thus, the burden falls on H2 to deliver a respectable FY21.

OB still suffices for a further scale-up. Despite no Q4 inflows, the OB (reported ~₹116bn, adj. ~₹111bn) implies ample revenue assurance and an operational scale-up, pending execution. It also insulates the firm from a short-term awarding lull. Nevertheless, having bid for projects of ~₹12.6bn, it seeks to soon bid for projects of another ~₹20bn.

Net debt shrinks q/q. The $\sim 10n$ q/q lower net debt (of ~ 1.8 bn) is a result of both absolute debt reduction and higher cash & equivalents. For FY21, management looks to maintain its D/E ratio of ~ 0.4 x at end-FY20.

Ùpdate on key Mumbai metro-rail projects. Line-3 (58% cumulative progress) is likely to be completed by Jun'22. Line-7 is nearly complete (90-95% progress already made). Line-2 has cumulative progress of 80-85%.

Valuation. Adjusting for the Covid'19-led disruption, FY21e earnings are ~95% lower (~42% for FY22). Our PER methodology-based TP is revised from ₹289 to ₹144, derived using 6x FY22e construction EPS. At the CMP, the stock trades at 3.9x FY22e EPS. Risk. Prolonged Covid-19 impact.

Key financials (YE Mar)	FY18	FY19	FY20P	FY21e	FY22e
Sales (₹ m)	20,507	27,871	29,705	20,629	30,748
Net profit (₹ m)	1,366	1,771	1,836	146	1,812
EPS (₹)	18.0	23.4	24.3	1.9	24.0
Growth (%)	27.2	29.7	3.7	-92.1	1,144.9
PE (x)	13.6	6.8	3.8	48.5	3.9
EV / EBITDA (x)	6.0	3.3	2.1	3.4	1.9
PBV (x)	1.2	0.7	0.4	0.4	0.4
RoE (%)	9.4	11.1	10.5	0.8	9.5
RoCE (%)	14.0	16.0	13.4	4.6	13.5
Net debt / equity (x)	0.0	0.1	0.1	0.0	0.1
Source: Company, Anand Rathi Research	P- Provisio	onal			

Rating: **Buy**Target Price: ₹144
Share Price: ₹93

Key data	JKIL IN / JKIP.BO
52-week high / low	₹180 / 65
Sensex / Nifty	34962 / 10312
3-m average volume	\$0.2m
Market cap	₹7.1bn / \$93m
Shares outstanding	76m

Shareholding pattern (%)	Mar'20	Dec'19	Sep'19
Promoters	45.3	44.7	44.1
- of which, Pledged	10.6	10.6	10.6
Free float	54.7	55.3	55.9
- Foreign institutions	9.6	10.7	15.7
- Domestic institutions	11.7	12.4	7.4
- Public	33.3	32.3	32.8

Estimates revision (%)	FY21e	FY22e
Sales	-44.1	-26.7
EBITDA	-62.9	-30.3
EPS	-94.6	-42.0



Source: Bloomberg

Prem Khurana Research Analyst

Rachit R Kamath
Research Associate

Anand Rathi Share and Stock Brokers Limited (hereinafter "ARSSBL") is a full-service brokerage and equities-research firm and the views expressed therein are solely of ARSSBL and not of the companies which have been covered in the Research Report. This report is intended for the sole use of the Recipient. Disclosures and analyst certifications are present in the Appendix.

Anand Rathi Research India Equities

Quick Glance – Financials and Valuations (standalone)

Fig 1 – Income staten	Fig 1 – Income statement (₹ m)						
Year-end: Mar	FY18	FY19	FY20P	FY21e	FY22e		
Order backlog	74,800	103,724	116,437	120,482	126,511		
Order inflow	2,095	56,249	41,836	24,270	36,175		
Net revenues	20,507	27,871	29,705	20,629	30,748		
Growth (%)	27.8	35.9	6.6	-30.6	49.1		
Direct costs	15,639	21,001	22,931	16,397	23,568		
SG&A	1,656	2,507	2,486	2,074	2,569		
EBITDA	3,212	4,363	4,289	2,158	4,612		
EBITDA margins (%)	15.7	15.7	14.4	10.5	15.0		
Depreciation	727	1,022	1,263	1,316	1,453		
Other income	285	281	283	284	282		
Interest expenses	703	939	977	930	1,004		
PBT	2,067	2,683	2,333	196	2,437		
Effective tax rate (%)	33.9	34.0	21.3	25.6	25.6		
+ Associates / (Minorities)	-	-	-	-	-		
Net income	1,366	1,771	1,836	146	1,812		
Adjusted income	1,366	1,771	1,836	146	1,812		
WANS	76	76	76	76	76		
FDEPS (₹ / sh)	18.0	23.4	24.3	1.9	24.0		

Fig 2 – Balance sheet (₹ m)							
Year-end: Mar	FY18	FY19	FY20P	FY21e	FY22e		
Share capital	378	378	378	378	378		
Net worth	15,088	16,675	18,310	18,341	19,948		
Debt	5,804	6,911	6,738	5,248	6,745		
Minority interest	-	-	-	-	-		
DTL / (Assets)	289	366	274	274	274		
Capital employed	21,180	23,952	25,321	23,862	26,967		
Net tangible assets	7,161	7,788	8,545	7,729	7,776		
Net intangible assets	-	-	-	-	-		
Goodwill	-	-	-	-	-		
CWIP (tang. & intang.)	1,262	798	987	987	987		
Investments (strategic)	150	316	12	12	12		
Investments (financial)	-	-	-	-	-		
Current assets (ex cash)	19,937	21,359	22,301	17,714	22,913		
Cash	5,106	4,713	4,950	4,968	4,887		
Current liabilities	12,435	11,022	11,474	7,547	9,608		
Working capital	7,502	10,337	10,827	10,167	13,305		
Capital deployed	21,180	23,952	25,321	23,862	26,967		
Contingent liabilities	24,243	25,847	-	-	-		

Fig 3 – Cash-flow statement (₹ m)							
Year-end: Mar	FY18	FY19	FY20P	FY21e	FY22e		
PBT + Net interest expense	2,485	3,341	3,027	842	3,159		
+ Non-cash items	727	1,022	1,263	1,316	1,453		
Oper. prof. before WC	3,212	4,363	4,289	2,158	4,612		
- Incr. / (decr.) in WC	100	2,835	490	-660	3,138		
Others incl. taxes	597	835	596	50	624		
Operating cash-flow	2,515	693	3,203	2,769	849		
- Capex (tang. + intang.)	3,323	1,186	2,208	500	1,500		
Free cash-flow	-808	-493	995	2,269	-651		
Acquisitions	-	-	-	-	-		
- Div.(incl. buyback & taxes)	182	182	205	114	205		
+ Equity raised	-	-	-	-	-		
+ Debt raised	1,435	1,107	-173	-1,490	1,498		
- Fin investments	147	165	-303	-	-		
- Net interest expense + misc.	422	659	683	647	722		
Net cash-flow	-123	-393	237	17	-80		
Source: Company, Anand Rathi Rese	P- Provis	ional					

Fig 4 – Ratio analysis					
Year-end: Mar	FY18	FY19	FY20P	FY21e	FY22e
P/E (x)	13.6	6.8	3.8	48.5	3.9
EV / EBITDA (x)	6.0	3.3	2.1	3.4	1.9
EV / Sales (x)	0.9	0.5	0.3	0.4	0.3
P/B (x)	1.2	0.7	0.4	0.4	0.4
RoE (%)	9.4	11.1	10.5	0.8	9.5
RoCE (%)	14.0	16.0	13.4	4.6	13.5
RoIC (%)	12.6	13.7	13.3	4.3	12.5
DPS (₹ / sh)	2.0	2.0	2.3	1.3	2.3
Dividend yield (%)	0.8	1.3	2.4	1.3	2.4
Dividend payout (%) - incl. DDT	13.3	10.3	11.2	78.3	11.3
Net debt / equity (x)	0.0	0.1	0.1	0.0	0.1
Receivables (days)	94	65	79	90	70
Inventory (days)	145	120	38	45	45
Payables (days)	59	40	57	47	45
CFO: PAT %	184.2	39.1	174.5	1,902.0	46.9
Source: Company, Anand Rathi Resear	rch	P- Provisi	onal		

Fig 5 - Price movement

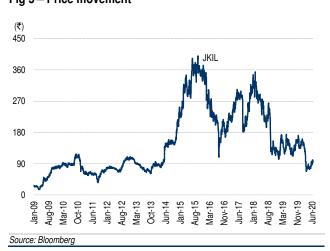
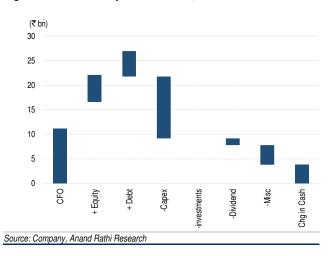


Fig 6 – Cumulative capital allocation, FY13-FY20



Result / Concall Highlights

Income statement

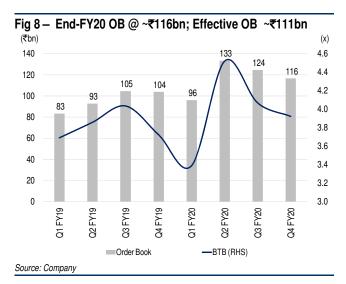
- Covid-19 disrupts revenue growth. Q4 revenues were understandably lower owing to the constrained execution pace in Mar'20, which eventually snowballed to a complete halt, resulting in a ~9% revenue decline to ~₹9bn. The Q4 execution pace otherwise was healthy and manifest in the ~11% higher sequential revenues. FY20 revenues were up ~7% y/y to ~₹30bn, largely led by the healthy ~15% 9M revenue growth
 - Covid-19 induced revenue loss is attributed at ~₹2bn-2.5bn on loss of ~20-25 man-days in this generally execution-heavy quarter.
 - Of FY20 revenues, ~75% came from its mainstay category of the metro-rail division; the balance from the other divisions.
- Q4 EBITDA margin contracts to its lowest since listing. Despite the Q4 gross margin largely tracking year-ago levels (up only ~31bps y/y), the EBITDA margin sharply contracted to ~10.5% (down ~337bps y/y). This is largely attributable to the negative operating leverage brought about by the under-absorption of fixed-costs owing to the Covid-induced loss in revenues. The Q4 impact affected the FY20 margin, which was down ~122bps y/y to ~14.4% (9M margins at ~16.1%).
 - EBITDA margins for the quarter and FY20 have undershot the guided-to EBITDA margin range of ~15-17%.
 - Management attributes ~300bps of the Q4 EBITDA slippage to the Covid-pandemic. The balance can be attributable to the change in project-mix/nature of works executed in the quarter.
 - The Q4 margin also marks the lowest EBITDA margin by the company since listing on the bourses in Feb'08.

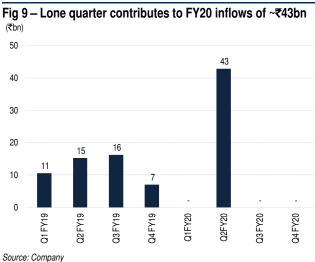
Fig 7 – Financial	ig 7 – Financial highlights												
₹m	Q1 FY19	Q2 FY19	Q3 FY19	Q4 FY19	Q1 FY20	Q2 FY20	Q3 FY20	Q4 FY20	% Y/Y	% Q/Q	FY19	FY20	% Y/Y
Sales	6,184	5,147	6,860	9,680	6,677	6,320	7,930	8,778	-9.3	10.7	27,871	29,705	6.6
EBITDA	1,000	910	1,113	1,341	1,113	1,076	1,180	919	-31.4	-22.1	4,363	4,289	-1.7
EBITDA margins (%)	16.2	17.7	16.2	13.8	16.7	17.0	14.9	10.5	-337bps	-440bps	15.7	14.4	-122bps
Interest	215	209	207	308	262	251	218	247	-19.8	13.3	939	977	4.0
Depreciation	250	255	263	254	289	312	311	350	37.7	12.4	1,022	1,263	23.5
Other income	63	91	30	96	56	58	89	80	-16.4	-9.5	281	283	0.6
PBT	598	536	673	875	619	571	740	403	-53.9	-45.5	2,683	2,333	-13.1
Tax	196	183	232	302	209	12	183	93	-69.3	-49.3	912	497	-45.5
PAT	402	354	442	573	409	559	557	311	-45.8	-44.2	1,771	1,836	3.7
Source: Company													

- New tax-regime aids in softening the impact. The lower operating profitability and higher depreciation (up ~38% y/y due to capex), pushed down earnings ~46% y/y to ~₹0.3bn. The decline would have been steeper had it not been for the shift to the new tax regime earlier in the year and the consequent lower tax rate. FY20 earnings growth (at ~4% y/y) outpaced operating profitability growth, largely due to the lower tax rate.
 - The Q4 tax rate was ~23%, against ~34.5% a year ago. For FY20 the tax-rate was ~21%, against ~34% a year ago.

Order backlog / Growth opportunities

- After the strong Q2 inflows, no additions to the order book have been made. This largely tracks management commentary from the previous quarter which talked of lack of sizable opportunities (in the immediate future) and a quenched appetite. Consequently, FY20 inflows were ∼₹43bn (all bagged in Q2 FY20).
 - Post-Q4, the company was awarded ~₹1.7bn of pending works for an elevated metro-rail project neighbouring its nearly complete elevated Line-7 metro-rail project in Mumbai.
- With no new inflows to cushion the quarter's execution, the end-Q4 order backlog contracted sequentially, by ~₹8bn, to ~₹116bn. Nevertheless, this provides ample assurance of ~3.9x FY20 revenues.
 - Adjusting for the ~₹5.6bn NBCC order that yet forms part of the OB, but regarding which the company has notified the client its intent to return the project, the effective end-FY20 OB was ~₹111bn. Even adjusted for the order, the effective OB yet provides ample assurance of ~3.7x FY20 revenues.
 - Despite adjusting for the NBCC order and the order book declining for the second straight quarter, it was yet the company's lifetime-high year-end closing order-book position.
 - Incl. the post-Q4 order wins, the effective order book has been augmented to ~₹113bn, providing sturdier revenue assurance of ~3.8x FY20 construction revenues.
- Its end-FY20 OB was metro-rail-heavy (~54% of the OB; ~35% elevated, ~19% underground); flyovers & bridges contributed ~33%, with civil works and other road projects making up the balance.
 - On the geographic diversity of the OB, Maharashtra (~69% share of its OB) and Delhi (~30%) virtually cover all of the company's order book. The balance is from Uttar Pradesh.





■ Management believes the government focus on the construction sector would continue, especially considering the sector's employment-generation capacity. For FY21, the company plans to close with an order book of ~₹130bn. Management sees sufficient avenues to bag orders and highlighted an immediate pipeline comprising:

- It has already bid for the ~₹10.6bn Worli-Sewri connector, a part of the extension of the Mumbai Trans-Harbour Link project. Management has been declared L1 at the project and expects the Letter of Intent by end-Q2 FY21.
- Besides this, it bid for a ~₹2bn road project from CIDCO.
- For the pending work of Line-2B project, tenders have already been floated, providing interested bidders an opportunity of ~₹10bn for one and ~₹5bn (a Kurla project) for the other.
- Besides these, there is another ~₹5bn metro-rail opportunity (Depot-line project) available in Mumbai. Bids for all three Mumbai metro-rail projects are expected to be submitted shortly.
- It also sees metro-rail opportunities in Gujarat, primarily in Ahmedabad (two projects) and Surat (one project).
- On the large opportunity from the Municipal Corporation of Greater Mumbai (MCGM) – the Goregaon-Mulund Link road (GMLR project, earlier estimated as a ~₹50bn opportunity) – management highlighted that earlier bids invited were cancelled and a pre-bid meeting has now been called in mid-Jul'20. It had earlier indicated the project is likely to have a ~3.5-4 year construction period.
- Management has decided against bidding for the Delhi-Meerut RRTS metro-rail project of the National Capital Region Transport Corporation (NCRTC). The bid potential was earlier pegged at ~₹16bn.
- It follows a cluster-based inflows approach and tends to look for more avenues to bag orders in the vicinity of its existing work-sites in order to gain from economies of scale as its set-up and man-power are already in the region. Thus, to bag orders it seeks to focus on Mumbai, Delhi, Ahmedabad, Surat, etc.

Balance sheet

- Net debt shrinks. Net debt on 31st Mar'20 was ~₹1.8bn, down ~₹1bn q/q. This was effected by a mix of absolute debt reduction (gross debt down ~₹0.3bn to ~₹6.7bn) and higher cash balances (up ~₹0.8bn q/q to ~₹5bn).
 - The debt reduction comes despite strong outlays on capex in Q4 (pegged at ~₹1bn). Against its outlays, the company availed of mobilisation advances and received payments from its clients.
 - Net-debt-to-equity at end-FY20 is a comfortable ~0.1x, down from ~0.2x a quarter ago.
 - For FY21, management looks to maintain its current gross-debt-to-equity mix, pegged at ~0.4x.
- Against the earlier targeted FY20 capex of ~₹1bn, management incurred ~₹1.8bn during the year.
 - It attributed the ~₹0.8bn additional capex incurred to its Dwarka Expressway Package-2 project (where it capitalised the casting yard costs) and the recently bagged Line-9 elevated metro-rail project.
 - Management said capex to be incurred in Q1 FY21 was advanced to FY20.

- For FY21, it seeks to incur ~₹0.5bn capex (earlier envisaged ~₹0.2bn-0.4bn).
- Mobilisation advances at end-FY20 were down ~₹1.3bn q/q to ~₹3.6bn despite availing of ~₹0.7bn of mobilisation advances at its Dwarka Expressway project during the quarter. This implies significant advances were set off against receivables.
- End-FY20 NWC days seem to have slightly contracted, by 2 days y/y, to 137. The composition, however, has drastically changed.
 - Inventory days are down 82 days y/y, to 38. Management attributes this to work-in-progress now being re-classified as unbilled revenues. Consequently, unbilled revenues of ~₹5.5bn at end-FY20, pushed loans & advances up 69 days y/y to 105.
- J Kumar has cumulative banking limits of ~₹41bn, split ~₹7bn as fund-based, the balance as non-fund-based.
 - Of its fund-based limits, management pegs utilisation at ~80%, implying unutilised limits at ~₹1.4bn.
 - Non-fund-based limits are ~₹34bn, of which ~₹24bn has already been utilised, implying unutilised limits of ~₹10bn.

Project updates

- Mumbai metro-rail Line-9. Awarded in Sep'19, the company signed the concession agreement in Oct'19. There have been additions to the scope-of-works owing to a change in the length of the flyover and thus delayed initial approvals. Having received approvals for treecutting, it has already commenced clearing the RoW. Also, it commenced piling works at the project and has already completed ~50-60 piles.
- Mumbai metro-rail Line-3 progress. The company has progress of ~58%, up from ~50% a quarter ago. Owing to the pandemic, the project is expected to be delayed. It is now expected to be complete by Jun'22. The company had earlier commenced RCC works and structural works for the main structures.
- NBCC's ~₹5.6bn order. While this order yet forms a part of the order book, management has already notified the client its intent to return the project, citing delays in the handover of the requisite land.
- Dwarka Expressway packages 1 & 2. Package 2 is now being executed having received an appointed date on 17th Oct'19. Management said with availability of ~85% of the required treecutting permissions, it awaits the balance permissions to commence execution at the project (expected in a month or a month and a half). Meanwhile, management has started utility-shifting and tree-cutting works at the project.
- Progress at various metro-rail projects (Lines- 2 and -7). Its Line-2 project is ~80-85% complete; up from ~75% a quarter ago. Line-7 progress at end-FY20 was ~90-95%. Management aims to complete these projects by end-FY21.

Other highlights

■ Execution in the Covid-19 context. The pandemic's impact was more pronounced for the company than for most of its peer-set as almost ~91% of the company's projects are in urban area (courtesy a metro-rail-heavy order book). Nevertheless, with the easing of the

lockdown restrictions, management has resumed construction across its sites, albeit at a constrained execution pace.

- Management was faced with initial teething issues in recommencing execution, especially on account of a disrupted supply chain, non-availability of labour and so on.
- While the supply-chain issues have largely been resolved, labour troubles continue. Pre-Covid, the number of labourers employed by the company were ~10,000 at all its sites.
- Currently, management pegs labour availability at ~20-25% (and a blended execution efficiency of ~15-20%).
- Management said that available labour is capable of carrying out essential works such as de-watering, site-maintenance, etc. But for revenue accretive works, available skilled manpower is low.
- Management said labour is returning and the increase would be seen gradually. The company is arranging for their transport facilities as it depends to a great extent on migrant labour. Management expects to build up a substantial labour base by Jul'20.
- The lost month (Apr'20) owing to the lockdown and constrained execution pace since resumption (from May'20) due to nonavailability of man-power is likely to result in a weak H1.
- Management expects revenues to see at least a 50% y/y decline in Q1. And, while Q2 is expected to be better, it would only be a slight improvement (owing to the monsoon). Thus, with a significant upswing and normalcy expected from Q3 only, management said FY21 revenues are likely to decline.
- Pre-Covid'19, management pegged its monthly fixed cost at ~₹0.5bn. It has since taken steps to rationalise fixed costs and now envisages monthly fixed costs at ~₹0.3bn.
- All payments due from the authorities have been disbursed timely.
 Management said that authorities, lacking adequate manpower, held (online) discussions with independent consultants/engineers, then disbursed payments online. It received substantial receivables in Q4.
- All its projects are eligible for extensions of three to six months owing to the lockdown.
- Management said the metro-rail authorities have compensated for wages paid during the lockdown. It added that some projects saw partial compensation for salaries of project employees.
- However, it alluded to the fact that the overall compensation is still
 being discussed and is likely to take more time as this would mean
 financial implications for the authority. At present, the company is
 at the stage of gathering necessary documentation and filing claims.
- It further said that, to ease pressures on contractors, the authorities are considering releasing bank guarantees submitted as performance guarantees and for the Defects Liability period, to the extent of works executed. Management has applied for this scheme and expects the release of a substantial amount.
- Management highlighted that all of its contracts cover raw-material price variation. Thus, any unfavourable changes in the price of raw materials are all passed through to clients.

Valuation

Owing to the Covid-brought on situation, the company is likely to lose man-days in FY21 (owing to non-availability of labour and restrictions). We see a part of this disruption spilling over to FY22. Accordingly, we lower our FY21e and FY22e revenue ~44% and ~27% respectively. To give effect to the negative operating leverage on under-absorption of fixed costs, we lower our FY21e and FY22e margins respectively 532bps and 77bps. The lower operating profitability and negative financial leverage would lead to ~95% lower earnings in FY21. For FY22, earnings would be down ~42%.

Mindful of the altered risk profile, we lower the PE valuation multiple for the EPC business to 6x, from 7x earlier.

On our revised estimates, our FY22e EPS of ~₹24 implies a target price of ₹144 (against ₹289 earlier).

Fig 10 – Change in estimates									
(₹ m)	Original Est	timates	Revised E	stimates	Change (%)				
	FY21e	FY22e	FY21e	FY22e	FY21e	FY22e			
Revenue	36,896	41,937	20,629	30,748	-44.1	-26.7			
EBITDA	5,824	6,613	2,158	4,612	-62.9	-30.3			
EPS (₹)	35.3	41.3	1.9	24.0	-94.6	-42.0			
Source: Anand Rat	hi Research								

On the new estimates, the stock trades at a PER of 3.9x FY22e. On PBV, the stock quotes at 0.4x FY21e and FY22e respectively, against our TP-implied exit-PBV of 0.5x.



Risk

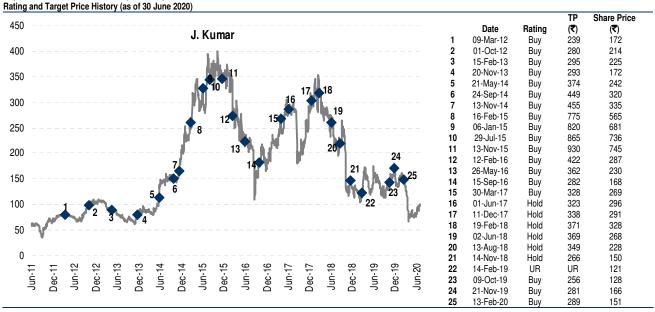
- Any prolonged impact from Covid-19.
- Significantly slower-than-expected execution.

Appendix

Analyst Certification

The views expressed in this Research Report accurately reflect the personal views of the analyst(s) about the subject securities or issuers and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst(s) in this report. The research analysts are bound by stringent internal regulations and also legal and statutory requirements of the Securities and Exchange Board of India (hereinafter "SEBI") and the analysts' compensation are completely delinked from all the other companies and/or entities of Anand Rathi, and have no bearing whatsoever on any recommendation that they have given in the Research Report.

Important Disclosures on subject companies



Anand Rathi Ratings Definitions

Analysts' ratings and the corresponding expected returns take into account our definitions of Large Caps (>US\$1bn) and Mid/Small Caps (<US\$1bn) as described in the Ratings Table below:

Ratings Guide (12 months)				
	Buy	Hold	Sell	
Large Caps (>US\$1bn)	>15%	5-15%	<5%	
Mid/Small Caps (<us\$1bn)< td=""><td>>25%</td><td>5-25%</td><td><5%</td><td></td></us\$1bn)<>	>25%	5-25%	<5%	

Research Disclaimer and Disclosure inter-alia as required under Securities and Exchange Board of India (Research Analysts) Regulations, 2014

Anand Rathi Share and Stock Brokers Ltd. (hereinafter refer as ARSSBL) (Research Entity) is a subsidiary of Anand Rathi Financial Services Ltd. ARSSBL is a corporate trading and clearing member of Bombay Stock Exchange Ltd, National Stock Exchange of India Ltd. (NSEIL), Multi Stock Exchange of India Ltd (MCX-SX) and also depository participant with National Securities Depository Ltd (NSDL) and Central Depository Services Ltd. ARSSBL is engaged in the business of Stock Broking, Depository Participant and Mutual Fund distributor.

The research analysts, strategists, or research associates principally responsible for the preparation of Anand Rathi research have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors and firm revenues.

General Disclaimer: This Research Report (hereinafter called "Report") is meant solely for use by the recipient and is not for circulation. This Report does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. The recommendations, if any, made herein are expression of views and/or opinions and should not be deemed or construed to be neither advice for the purpose of purchase or sale of any security, derivatives or any other security through ARSSBL nor any solicitation or offering of any investment /trading opportunity on behalf of the issuer(s) of the respective security (ies) referred to herein. These information / opinions / views are not meant to serve as a professional investment guide for the readers. No action is solicited based upon the information provided herein. Recipients of this Report should rely on information/data arising out of their own investigations. Readers are advised to seek independent professional advice and arrive at an informed trading/investment decision before executing any trades or making any investments. This Report has been prepared on the basis of publicly available information, internally developed data and other sources believed by ARSSBL to be reliable. ARSSBL or its directors, employees, affiliates or representatives do not assume any responsibility for, or warrant the accuracy, completeness, adequacy and reliability of such information / opinions / views. While due care has been taken to ensure that the disclosures and opinions given are fair and reasonable, none of the directors, employees, affiliates or representatives of ARSSBL shall be liable for any direct, indirect, special, incidental, consequential, punitive or exemplary damages, including lost profits arising in any way whatsoever from the information / opinions / views contained in this Report. The price and value of the investments referred to in this Report and the income from them may go down as well as up, and

Opinions expressed are our current opinions as of the date appearing on this Research only. We do not undertake to advise you as to any change of our views expressed in this Report. Research Report may differ between ARSSBL's RAs and/ or ARSSBL's associate companies on account of differences in research methodology, personal judgment and difference in time horizons for which recommendations are made. User should keep this risk in mind and not hold ARSSBL, its employees and associates responsible for any losses, damages of any type whatsoever.

ARSSBL and its associates or employees may; (a) from time to time, have long or short positions in, and buy or sell the investments in/ security of company (ies) mentioned herein or (b) be engaged in any other transaction involving such investments/ securities of company (ies) discussed herein or act as advisor or lender / borrower to such company (ies) these and other activities of ARSSBL and its associates or employees may not be construed as potential conflict of interest with respect to any recommendation and related information and opinions. Without limiting any of the foregoing, in no event shall ARSSBL and its associates or employees or any third party involved in, or related to computing or compiling the information have any liability for any damages of any kind.

Details of Associates of ARSSBL and Brief History of Disciplinary action by regulatory authorities & its associates are available on our website i.e. www.rathionline.com

Disclaimers in respect of jurisdiction: This report is not directed to, 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 or regulation or which would subject ARSSBL to any registration or licensing requirement within such jurisdiction(s). No action has been or will be taken by ARSSBL in any jurisdiction (other than India), where any action for such purpose(s) is required. Accordingly, this Report shall not be possessed, circulated and/or distributed in any such country or jurisdiction unless such action is in compliance with all applicable laws and regulations of such country or jurisdiction. ARSSBL requires such recipient to inform himself about and to observe any restrictions at his own expense, without any liability to ARSSBL. Any dispute arising out of this Report shall be subject to the exclusive jurisdiction of the Courts in India.

Statements on ownership and material conflicts of interest, compensation - ARSSBL and Associates

Answers to the Best of the knowledge and belief of ARSSBL/ its Associates/ Research Analyst who is preparing this report

Research analyst or research entity or his associate or his relative has any financial interest in the subject company and the nature of such financial interest.	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have actual/beneficial ownership of one per cent or more securities of the subject company, at the end of the month immediately preceding the date of publication of the research report?	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have actual/beneficial ownership of one per cent or more securities of the subject company	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have any other material conflict of interest at the time of publication of the research report?	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation from the subject company in the past twelve months	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have managed or co-managed public offering of securities for the subject company in the past twelve months	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation for investment banking or merchant banking or brokerage services from the subject company in the past twelve months	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past twelve months	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation or other benefits from the subject company or third party in connection with the research report	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have served as an officer, director or employee of the subject company.	No	

Other Disclosures pertaining to distribution of research in the United States of America

This research report is a product of ARSSBL, which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account.

This report is intended for distribution by ARSSBL only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor.

In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, ARSSBL has entered into an agreement with a U.S. registered broker-dealer, Cabrera Capital Markets. ("Cabrera"). Transactions in securities discussed in this research report should be effected through Cabrera or another U.S. registered broker dealer.

- 1. ARSSBL or its Affiliates may or may not have been beneficial owners of the securities mentioned in this report.
- 2. ARSSBL or its affiliates may have or not managed or co-managed a public offering of the securities mentioned in the report in the past 12 months.
- 3. ARSSBL or its affiliates may have or not received compensation for investment banking services from the issuer of these securities in the past 12 months and do not expect to receive compensation for investment banking services from the issuer of these securities within the next three months.
- 4. However, one or more of ARSSBL or its Affiliates may, from time to time, have a long or short position in any of the securities mentioned herein and may buy or sell those securities or options thereon, either on their own account or on behalf of their clients.
- 5. As of the publication of this report, ARSSBL does not make a market in the subject securities.
- 6. ARSSBL or its Affiliates may or may not, to the extent permitted by law, act upon or use the above material or the conclusions stated above, or the research or analysis on which they are based before the material is published to recipients and from time to time, provide investment banking, investment management or other services for or solicit to seek to obtain investment banking, or other securities business from, any entity referred to in this report.
- © 2019. This report is strictly confidential and is being furnished to you solely for your information. All material presented in this report, unless specifically indicated otherwise, is under copyright to ARSSBL. None of the material, its content, or any copy of such material or content, may be altered in any way, transmitted, copied or reproduced (in whole or in part) or redistributed in any form to any other party, without the prior express written permission of ARSSBL. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of ARSSBL or its affiliates, unless specifically mentioned otherwise.

Additional information on recommended securities/instruments is available on request.

ARSSBL registered address: Express Zone, A Wing, 9th Floor, Western Express Highway, Diagonally Opposite Oberoi Mall, Malad (E), Mumbai – 400097.

Tel No: +91 22 6281 7000 | Fax No: +91 22 4001 3770 | CIN: U67120MH1991PLC064106.