

09 August 2020

Birla Corporation

Lockdown hit performance; outlook intact; retaining a Buy

Its cement and jute divisions hit by the lockdown and cyclone Amphan, Birla Corp's revenue/EBITDA/PAT fell 35%/39%/53% y/y. Frequent local lockdowns and floods in Bihar are hurting demand. Besides the ongoing expansion, the Board approved the Durgapur expansion to address premium-slag demand in the East. We do not expect much rise in the Net D/E backed by expected profitability improvement despite leveraged B/S. We retain our Buy rating, and raise our target to ₹830 (earlier ₹650).

Demand pick-up would help. On the 33% y/y volume drop (severe disruptions in key markets and manufacturing centres) and the 1% y/y realisation drop (mainly weak prices in the East), revenue plunged 35% y/y. Though demand is expected to continue to be hampered on frequent local lockdown and floods in the East, demand would pick up in the Central region due to government-funded projects and welfare schemes (MGNREGA, PMKGY); greater labour availability would help. We expect volumes to dip 8.6% y/y in FY20 and grow 9.4% in FY21.

Operating performance to get back on track. EBITDA/ton declined 6.8% y/y to ₹982; EBITDA, 39% y/y (on low fixed-cost absorption and capacity utilisation). Further, the jute division suffered a PBIT loss of ₹43m (lockdowns, cyclone Amphan). We believe that ramped up production and the constant focus on brand, more blended cement sales, high solar power use will help to EBITDA/ton of ₹901/ ₹975 in FY21/22 (vs ₹965 in FY20).

Business Outlook, Valuation. While the Kundanganj expansion continues to be postponed, the BOD approved to expand Durgapur GU capacity by 0.24m ton by Q3FY23 whereas Yavatmal expansion to commence by Q2 FY22. This will keep leverage high, however, we expect, net D/E of 0.79x in FY22 (vs 0.77x a year ago) on improved profitability. We retain our Buy rating, raising our target to ₹830, valuing it at 8x FY22e EV/EBITDA and an EV/ton of \$62. **Risks:** High pet-coke and diesel prices, extended lockdowns.

Key financials (YE Mar)	FY18	FY19	FY20	FY21e	FY22e
Sales (₹ m)	57,300	65,487	69,157	63,720	71,240
Net profit (₹ m)	1,664	2,557	5,052	3,034	3,879
EPS (₹)	21.6	33.2	65.6	39.4	50.4
PE (x)	33.0	15.8	6.3	16.6	13.0
EV / EBITDA (x)	11.6	8.3	5.3	8.1	7.0
EV / ton (\$)(Cement)	60.8	51.6	47.4	63.6	52.6
RoE (%)	4.4	5.8	10.9	6.2	7.4
RoCE (%) -after tax	5.1	5.1	7.2	5.0	5.6
Dividend yield (%)	0.9	1.4	1.8	1.0	1.0
Net debt / equity (x)	0.9	0.8	0.8	0.8	0.8

Source: Company, Anand Rathi Research

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.

Rating: **Buy**

Target Price: ₹830

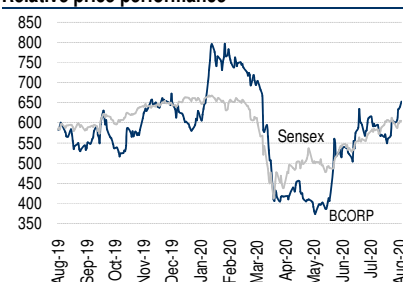
Share Price: ₹653

Key data	BCORP IN / BRLC.BO
52-week high / low	₹808 / 372
Sensex / Nifty	38041 / 11214
3-m average volume	\$3.6m
Market cap	₹50bn / \$671.1m
Shares outstanding	77m

Shareholding pattern (%)	Jun'20	Mar'20	Dec'19
Promoters	62.9	62.9	62.9
- of which, Pledged			
Free float	37.1	37.1	37.1
- Foreign institutions	3.6	4.2	3.9
- Domestic institutions	14.6	15.3	15.5
- Public	18.9	17.6	17.8

Estimates revision (%)	FY21e	FY22e
Sales	(0.8)	1.2
EBITDA	5.0	0.9
PAT	24.0	13.5

Relative price performance



Source: Bloomberg

Manish Valecha
Research Analyst

Vibha Jain
Research Associate

Quick Glance – Financials and Valuations

Fig 1 – Income statement (₹ m)

Year-end: Mar	FY18	FY19	FY20	FY21e	FY22e
Sales volume	12.4	13.6	13.6	12.4	13.6
Net revenues (₹ m)	57,300	65,487	69,157	63,720	71,240
Growth (%)	31.8	14.3	5.6	-7.9	11.8
Direct costs	37,422	42,746	41,801	40,405	42,805
SG&A	11,797	13,255	13,997	11,968	14,928
EBITDA	8,081	9,486	13,360	11,347	13,507
EBITDA margins (%)	14.1	14.5	19.3	17.8	19.0
- Depreciation	3,322	3,391	3,519	3,661	4,510
Other income	740	785	851	765	855
Interest expenses	3,776	3,705	3,877	4,116	4,311
PBT	1,723	3,174	6,815	4,334	5,541
Effective tax rate (%)	3.7	19.4	25.9	30.0	30.0
+ Associates / (Minorities)					
Net income	1,540	2,557	5,052	3,034	3,879
Adjusted income	1,664	2,557	5,052	3,034	3,879
WANS	77	77	77	77	77
FDEPS (₹ / sh)	21.6	33.2	65.6	39.4	50.4
FDEPS growth (%)	-26.5	53.6	97.6	-39.9	27.8

Fig 3 – Cash-flow statement (₹ m)

Year-end: Mar	FY18	FY19	FY20	FY21e	FY22e
PBT	1723	3174	6815	4334	5541
+ Non-cash items	3322	3391	3519	3661	4510
Oper. prof. before WC	5045	6566	10334	7995	10051
- Incr. / (decr.) in WC	1628	417	-1229	-1248	368
Others incl. taxes	238	640	570	1100	1662
Operating cash-flow	3179	5509	10993	8143	8021
- Capex (tang. + intang.)	12949	3864	11030	10500	9941
Free cash-flow	-9770	1645	-37	-2357	-1920
Acquisitions					
- Div. (incl. buyback & taxes)	603	696	696	501	501
+ Equity raised	0	0	0	0	0
+ Debt raised	-331	-1	2791	3000	1700
- Fin investments	1080	2046	-406	0	0
- Misc. (CFI + CFF)	-10858	-290	1294	200	0
Net cash-flow	-926	-809	1169	-58	-720

Source: Company, Anand Rathi Research

Fig 2 – Balance sheet (₹ m)

Year-end: Mar	FY18	FY19	FY20	FY21e	FY22e
Share capital	770	770	770	770	770
Net worth	42,798	44,952	48,061	50,595	53,973
Debt	45,300	45,300	48,090	51,090	52,790
Minority interest	0				
DTL / (Assets)	7,449	7,422	8,568	8,568	8,568
Capital employed	95,547	97,674	1,04,719	1,10,253	1,15,331
Net tangible assets	63,737	62,941	63,742	71,620	90,051
Net intangible assets	9,949	9,701	9,513	9,513	9,513
Good will	2	0	0	0	0
CWIP (tang. & intang.)	7,623	9,141	16,039	15,000	2,000
Investments (strategic)	2,500	2,764	1,600	1,600	1,600
Investments (financial)	4,222	6,003	6,762	6,762	6,762
Current assets (ex cash)	20,515	21,376	21,540	20,839	23,226
Cash	2,198	1,390	2,558	2,500	1,780
Current liabilities	15,198	15,642	17,035	17,582	19,601
Working capital	5,317	5,734	4,506	3,258	3,625
Capital deployed	95,547	97,675	1,04,720	1,10,253	1,15,331
Contingent liabilities	4,263	4,241	-	-	-

Fig 4 – Ratio analysis

Year-end: Mar	FY18	FY19	FY20	FY21e	FY22e
P/E (x)	33.0	15.8	6.3	16.6	13.0
EV / EBITDA (x)	11.6	8.3	5.3	8.1	7.0
EV / Sales (x)	1.6	1.2	1.0	1.4	1.3
P/B (x)	1.3	0.9	0.7	1.0	0.9
RoE (%)	4.4	5.8	10.9	6.2	7.4
RoCE (%) - after tax	5.1	5.1	7.2	5.0	5.6
DPS (₹ / sh)	6.5	7.5	7.5	6.5	6.5
Dividend payout (%) - incl. DDT	39.2	27.2	13.8	16.5	12.9
Net debt / equity (x)	0.9	0.8	0.8	0.8	0.8
WC days	28.7	30.8	27.0	22.2	17.6
EV / ton (\$)(Cement)	60.8	51.6	47.4	63.6	52.6
NSR / ton (₹)	4543	4571	4840	4900	5020
EBITDA / ton (₹)	621	683	965	901	975
Volumes (m tons)	12.4	13.6	13.6	12.4	13.6
CFO : PAT (%)	191.0	215.4	217.6	268.4	206.8

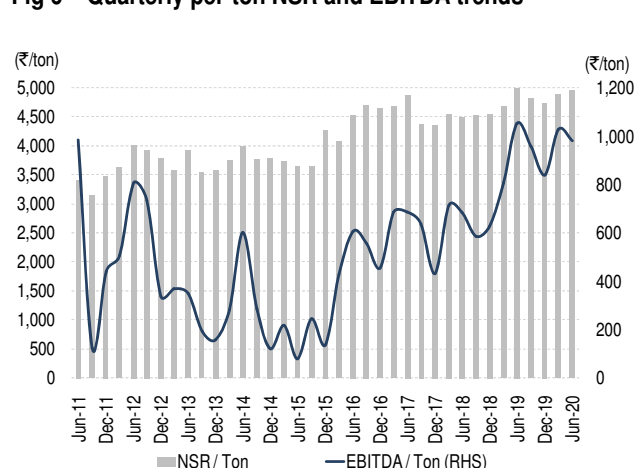
Source: Company, Anand Rathi Research

Fig 5 – Price movement



Source: Bloomberg

Fig 6 – Quarterly per-ton NSR and EBITDA trends



Source: Company, Anand Rathi Research

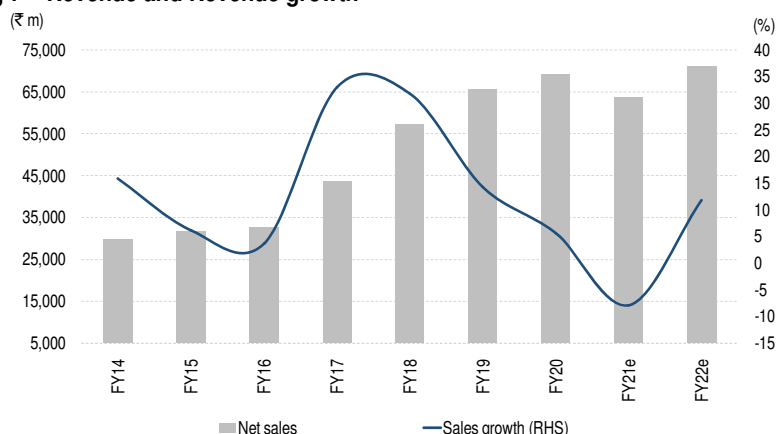
Key highlights

Birla Corp's Q1 revenue declined 35% y/y to ₹12.2bn because of the 33% y/y drop in volumes to 2.4m tons and realisations dipping 1.06% y/y to ₹4,956/ton. The topline was impacted by severe disruptions in its key markets and manufacturing centres due to the Covid-19 pandemic and soft prices in the East. Capacity utilisation declined to 58%, from 96% a year ago.

Clinker production at the company's Satna and Chanderia plants could not start immediately after the general easing of the lockdown due to district-specific conditions. Similarly, the company's two grinding units in Rae Bareilly, Uttar Pradesh, could resume production only in early May, leading to loss of sales in lucrative home markets.

On the arrival of the monsoon, from end-Jun cement prices have started to weaken in key markets. The company is seeing demand from government-led infrastructure projects and release of funds for welfare schemes such as MGNREGA and PMGKY.

Fig 7 – Revenue and Revenue growth



Source: Company, Anand Rath Research

EBITDA/ton for the quarter declined 6.8% y/y to ₹982 on account of low fixed-cost absorption and capacity utilization and the adverse situation in some of the company's key markets.

The company maintained the share of blended cement at 94%, whereas the sale of premium products declined to 36% of trade sales, compared to 44% in Q1 FY20. The share of trade sales was 86% of sales volumes (84% a year ago).

PAT for the quarter declined 53% y/y to ₹658m on lower operating profit, partially offset by lower interest expenses (down 16.7% y/y) and higher other income.

Fig 8 – Operational details

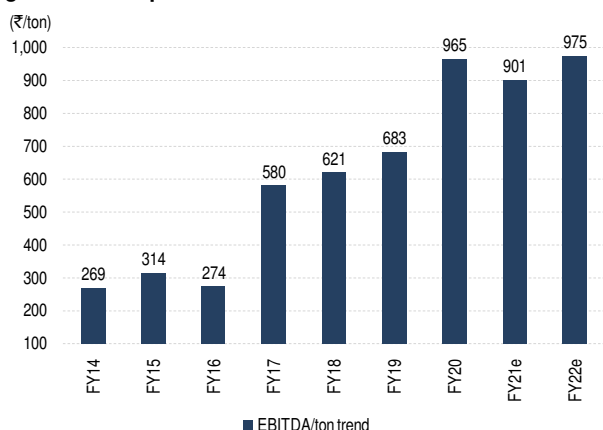
Particulars (%)	Q1 FY21	Q1FY20	Q4 FY20	FY20	FY19
Blended Cement	94	94	92	93	89
Trade Channel	86	84	80	81	81
Premium Cement(% of Trade sales)	36	44	43	41	37
Capacity Utilisation	58	96	93	91	89

Source: Company

The jute division

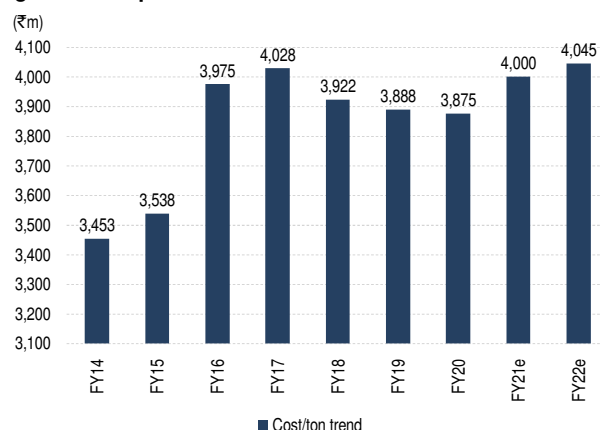
Hit by the lockdown and cyclone Amphan, jute production volumes plunged 80%, leading to EBITDA loss of ₹34.2m vs EBITDA of ₹48.3m a year ago. The company's jute mill at Birlapur in West Bengal could operate for only 16 days during the quarter ending June contrasted with 89 days in the year-ago corresponding period.

Fig 9 – EBITDA-per-ton trend



Source: Company, Anand Rathi Research

Fig 10 – Cost-per-ton trend

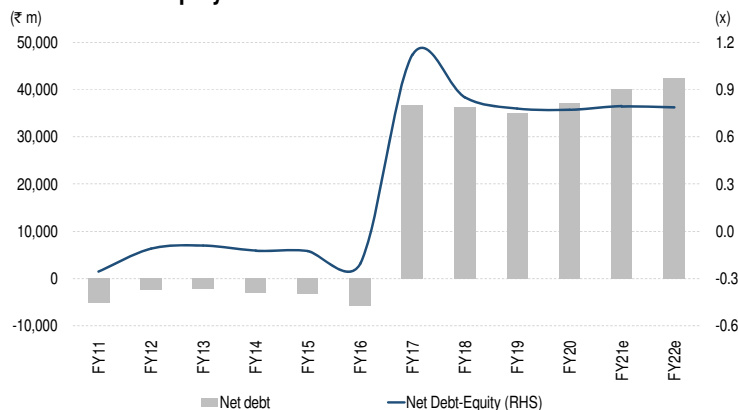


Source: Company, Anand Rathi Research

Project Update

- **Mukutban:** The factory with 2.64m tons clinker capacity and 3.9m tons cement capacity with its own railway siding is expected to be commissioned by Q2 FY22. The proposed unit is to have a 40MW plant and a 9MW WHRS. Of ₹24.5bn, the company spent ₹10.85bn on the project till FY20.
- **Kundanganj:** The company has decided to keep the ₹2.5bn expansion of its Kundanganj unit on hold for now to restrict debt and conserve liquidity.
- **Chandaria:** It is expanding the kiln capacity of its Chandaria unit in Rajasthan, expected to be complete by end-FY21, when capacity will be augmented by around 400,000 tons. Of ₹1.5bn, it has spent ₹700m till FY20
- **Durgapur:** The BOD approved a proposal to expand the Durgapur GU capacity by 0.24m tons to 1.54m tons at capex of ₹725.7m, expected to be commissioned by Q3 FY23.

Fig 11 – Net debt-to-equity



Source: Company, Anand Rathi Research

Result Highlights

Fig 12 – Quarterly Trend

(₹ m)	Q3 FY18	Q4 FY18	Q1 FY19	Q2 FY19	Q3 FY19	Q4 FY19	Q1 FY20	Q2 FY20	Q3 FY20	Q4 FY20	Q1 FY21	% Y/Y	% Q/Q
Sales	13,893	16,506	16,545	14,646	15,569	18,728	18,838	16,269	17,151	16,900	12,220	-35%	-28%
EBITDA	1,387	2,507	2,464	1,856	2,071	3,095	3,847	3,121	2,946	3,446	2,331	-39%	-32%
EBITDA margin (%)	10.0	15.2	14.9	12.7	13.3	16.5	20.4	19.2	17.2	20.4	19.1	-134bps	-132bps
EBITDA per ton (₹)	432	715	684	585	629	807	1,053	958	839	1,029	982	-7%	-5%
Interest	958	829	952	935	922	896	960	1,030	977	909	800	-17%	-12%
Depreciation	823	836	857	870	836	829	862	879	884	894	877	2%	-2%
Other income	141	334	232	203	106	244	169	199	203	281	190	13%	-32%
PBT	(252)	1,177	887	254	419	1,615	2,192	1,411	1,289	1,924	845	-61%	-56%
Tax	(34)	(135)	48	91	146	333	786	527	474	(24)	188	-76%	-894%
PAT	(218)	1,311	839	163	274	1,282	1,406	883	815	1,947	658	-53%	-66%

Source: Company, Anand Rathi Research

Fig 13 – Segment-wise performance

(₹ m)	Q3 FY18	Q4 FY18	Q1 FY19	Q2 FY19	Q3 FY19	Q4 FY19	Q1 FY20	Q2 FY20	Q3 FY20	Q4 FY20	Q1 FY21	% Y/Y	% Q/Q
Revenue													
-Jute	657	968	722	717	956	918	801	877	887	768	326	-59%	-58%
-Cement	13,227	15,528	15,822	13,923	14,616	17,807	18,033	15,391	16,268	16,133	11,894	-34%	-26%
-Others	15	11	15	17	20	15	16	20	31	15	10	-41%	-36%
Total	13,899	16,507	16,558	14,657	15,592	18,741	18,850	16,289	17,186	16,915	12,229	-35%	-28%
Less: Inter-segment revenue	5	2	13	11	23	13	11	20	35	16	10	-15%	-37%
Net sales	13,893	16,506	16,545	14,645	15,569	18,728	18,838	16,269	17,151	16,900	12,220	-35%	-28%
PBIT													
-Jute	53	48	32	36	29	9	31	34	44	28	(43)	P2L	P2L
% of revenue	8.1	4.9	4.4	5.0	3.0	1.0	3.8	3.8	4.9	3.6	(13.0)	NA	NA
-Cement	664	1,723	1,858	1,300	1,157	2,395	3,116	2,360	2,170	2,815	1,660	-47%	-41%
% of revenue	5.0	11.1	11.7	9.3	7.9	13.4	17.3	15.3	13.3	17.4	14.0	-333bps	-349bps
-Others	(8)	(10)	(5)	(9)	(8)	(10)	(5)	(8)	(7)	(7)	(13)	NA	NA
% of revenue	(55.2)	(83.3)	(33.6)	(51.1)	(39.9)	(66.2)	(31.7)	(40.2)	(21.4)	(48.0)	(132.6)	NA	NA
Total	709	1,761	1,885	1,327	1,178	2,394	3,142	2,385	2,207	2,836	1,605	-49%	-43%
Less: Interest	958	829	952	935	922	896	960	1,030	977	909	800	-17%	-12%
Less: Other unalloc. exp. net of unalloc. inc.	4	(245)	46	139	(164)	(116)	(10)	(55)	(59)	3	(40)	NA	NA
PBT (before extraord.)	(252)	1,177	887	253	419	1,615	2,192	1,411	1,289	1,924	845	-61%	-56%

Source: Company, Anand Rathi Research

Valuations

A judicious geographic- and product-mix aimed at increasing the share of blended and premium cement within its portfolio are positives. Birla Corp's strong brand focus, various cost-saving measures (WHRS/solar plant/railway siding at Kundanganj) would help, operationally. The adoption of the new tax regime (Section 115 BAA of The IT Act, 1962) by three subsidiaries (RCCPL, Birla Jute Supply, Lok Cements) out of seven would save on taxes. The frequent local lockdowns and floods in Bihar are hurting demand. Besides ongoing expansion, the BOD further approved Durgapur expansion to cater premium slag demand in East. We do not expect much rise in the Net D/E backed by expected profitability improvement despite leveraged B/S.

Change in estimates

We have broadly maintained our revenue estimates. However, we raise FY21e EBITDA 5% and FY21e/FY22e PAT 24%/13.5%.

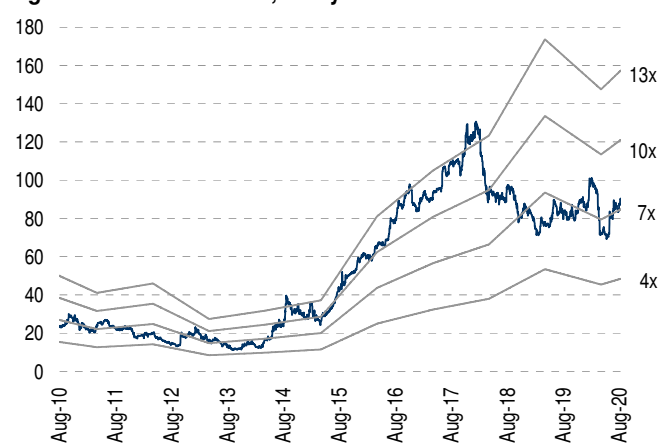
Fig 14 – Change in estimates

(₹ m)	New		Old		Variance	
	FY21e	FY22e	FY21e	FY22e	% chg	% chg
Sales	63,720	71,240	64,217	70,404	(0.8)	1.2
EBITDA	11,347	13,507	10,810	13,386	5.0	0.9
PAT	3,034	3,879	2,447	3,416	24.0	13.5

Source: Anand Rathi Research

We maintain our Buy rating on the stock, while raising our target price to ₹830 (earlier ₹650), valuing it at 8x FY22e EV/EBITDA, and \$62 EV/ton, based on the current market price and the company's high leverage

Fig 15 – EV/EBITDA band, one-year-forward



Source: Bloomberg, Anand Rathi Research

Fig 16 – EV/EBITDA: Standard deviation, one-year-forward



Source: Bloomberg, Anand Rathi Research

Risk

- Extension of the lockdown
- Rise in pet-coke and diesel prices.

Fig 16 – Peer comparison – Valuations

	CMP (₹)	P/E (x)		EV / EBITDA (x)		EV / ton (\$)	
		FY21e	FY22e	FY21e	FY22e	FY21e	FY22e
Birla Corp.	653	16.6	13.0	8.1	7.0	64	53
Dalmia Bharat	769	NA	NA	8.1	7.2	99	88
Deccan Cement	246	11.5	7.5	5.2	3.3	19	16
Heidelberg Cement	183	18.8	13.7	9.1	7.0	83	77
India Cement	117	NA	30.4	12.9	9.4	58	59
JK Cement	1,600	33.3	21.2	15.7	11.4	124	119
JK Lakshmi	286	17.9	11.7	7.6	5.5	48	42
Mangalam Cement	202	14.6	8.2	7.0	5.0	38	35
NCL Indus	91	11.1	7.8	5.4	4.5	31	31
Orient Cement	71	25.3	12.7	7.5	5.7	41	38
Prism Johnson	46	NA	28.1	10.7	7.7	51	49
Ramco Cement	688	38.6	25.4	21.3	14.9	126	121
Sanghi Indus	25	NA	14.0	11.9	7.7	42	41

Source: Anand Rathi Research

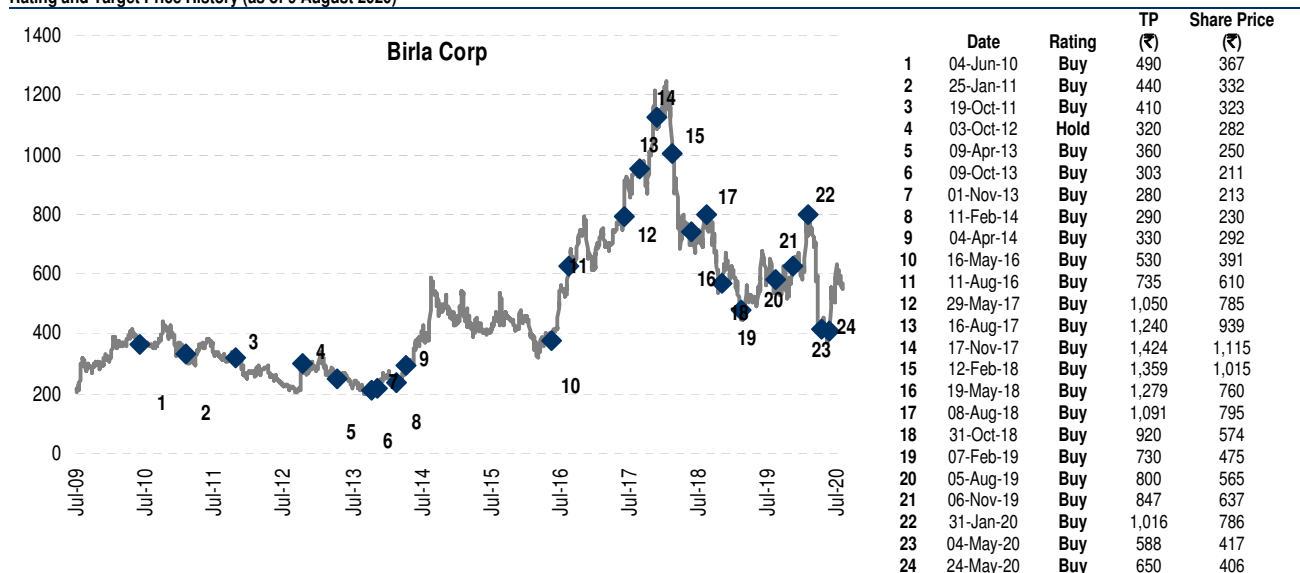
Appendix

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

Rating and Target Price History (as of 9 August 2020)



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)	>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 investors may realize losses on any investments. Past performance is not a guide for future performance. ARSSBL does not provide tax advice to its clients, and all investors are strongly advised to consult with their tax advisers regarding taxation aspects of any potential investment.

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.