

Tata Chemicals

8 April 2020

Reuters: TTCH.NS; Bloomberg: TTCH IN

Downgrading to Accumulate on global woes

We are downgrading TTCH (now ex-consumer) from Buy to Accumulate with our reduced TP of Rs220 (-3.8% from CMP) post our aggressive cuts in FY20-22E. We have cut our earnings for FY20E by 13.2% on the marginal impact of the lockdown in March. We have cut our FY21-22E volume, price and margin estimates in Chemicals across all its geographies due to (a) the immediate lockdown impact due to reduction in all its operations, according to the company's recent exchange filing (Annexure - II) and (b) the risk of global demand destruction in key end use segments for its key product soda ash (75% of revenue) – of at least 10% on average over the year due to the collapse in the global economy, particularly in key markets in the US and EU. These are subject to review as we get more details on the impact. Rallis has also shut down its three Indian formulation plants, which is likely to hurt the CPC subsidiary's 1Q, especially in exports (33% of revenue). The rising input costs due to supply shortages and the pressure on export volumes would squeeze growth in margins and earnings for Rallis (8-10% of TTCH earnings). Overall, we see the pressure on earnings dampening returns for TTCH, with mid-single digit ROCE likely over the next two years although the company's net debt/EBITDA remains reasonable.

4QFY20E (YoY – on ex-consumer basis): Revenue down 4.8% at Rs24bn on 6.7% cut in chemical volumes. EBITDA margin is marginally up by 28bps from 17.4% to 17.7% YoY. Consolidated PAT is down 22.4% to Rs 1.9bn, due to lower share of profits from JVs.

We see sharp fall in chemical EBITDA/tonne: Our estimates for FY21-22E are based on soda ash price of US\$203/tonne overseas (10.5/14.3% cut in FY21E/FY22E) and Rs19,350/tonne in India (18/22% down in FY21E/FY22E). We see EBITDA per tonne for the chemical segment dropping from Rs5,238/tonne in FY20E to Rs5,111/tonne in FY22E. The absence of new capacity additions is a silver lining, which may still not be enough to prevent capacity utilization rates dropping from about 82-83% to about 75%.

US, EU markets may take time to recover from COVID impact: We are cutting our basic chemistry segment (chemical) volume in soda ash by 11%/9% to 3.4/3.6mn tonne in FY21/22E. The potential savings in energy and freight costs may be negated by the hit on demand from end use customers in auto and construction (50% of global demand). EU could be pushed into a loss while US EBITDA could fall at least 20% in FY21E. TCNA and TCE have 32.7/14% share in revenue and 38/5.9% in EBITDA respectively (FY19).

India may recover ahead of overseas markets: India revenue is likely to remain subdued at Rs28.8bn in FY20E- Rs34.7bn in FY22E and margins in the range of 26.8% to 28.7% over FY20-22E. We see soda ash and bicarb expansion benefits supporting growth in 2HFY22, with the full benefits likely between FY23-24. Growth in premium medical grade bicarb post 40% expansion and detergent market for soda ash (40% of Indian pie) could see TTCH India business revive ahead of other regions, as the household market for "mass category" detergent brands (Indian detergent market size Rs130bn) are unlikely to suffer, barring the limited supply-related hit on sales during the lockdown.

Our SOTP based TP of implies 8.16x PE on FY22E: We value TTCH using EV/E of 4x on chemicals (including India specialty) and the value of 50% stake Rallis at CMP less 20% conglomerate discount. The stock trades at 8.5x PE on FY22E as compared to 5-year median PE of 5.8x and the SD+1 reading of 6.7x. The stock has lost 22% in the last one month on the post demerger price. The fall has priced in some of the concerns and investors could look to buy the stock on dips below Rs200 for a 2-3 year holding.

Y/E March (Rsmn)	FY18	FY19	FY20E	FY21E	FY22E
Revenues	1,02,697	1,03,367	1,04,052	98,131	1,11,199
EBITDA	21,907	17,804	19,769	11,891	18,434
Consol. Net Profit Adjusted*	23,687	10,856	8,308	3,089	6,874
EV/FCF (x)	1.8	5.5	-22.2	9.0	9.0
EPS (Rs)	48.1	33.8	32.6	12.1	27.0
EPS gr (%)	39.4	-29.7	-3.6	-62.8	122.5
EBITDA Margin (%)	21.3	17.2	19.0	12.1	16.6
P/E	4.8	6.8	7.0	18.9	8.5
EV/EBITDA	3.5	4.4	3.9	6.5	4.2
Net Debt/Equity (X)	-0.01	0.13	0.15	0.10	0.05
Pre-tax RoCE (%)	9.4	6.6	6.3	2.1	5.0
RoE (%)	12.9	7.4	6.6	2.4	5.2

Note:*FY18 Cons. PAT Adjusted excludes gain on fertiliser business sale; Source: Company, Nirmal Bang Institutional Equities Research

Accumulate

Sector: Chemicals

CMP: Rs229

Target Price: Rs220

Downside: 3.8%

Amit Agarwal

Research Analyst

amit.agarwal@nirmalbang.com

+91-22-6273 8145

Key Data

Current Shares O/S (mn)	254.8
Mkt Cap (Rsb/US\$m)	58.5/774.1
52 Wk H / L (Rs)	344/197
Daily Vol. (3M NSE Avg.)	1,414,967

Price Performance (%)

	1 M	6 M	1 Yr
TTCH	(26.2)	(9.7)	(14.8)
Nifty Index	(20.0)	(21.0)	(24.2)

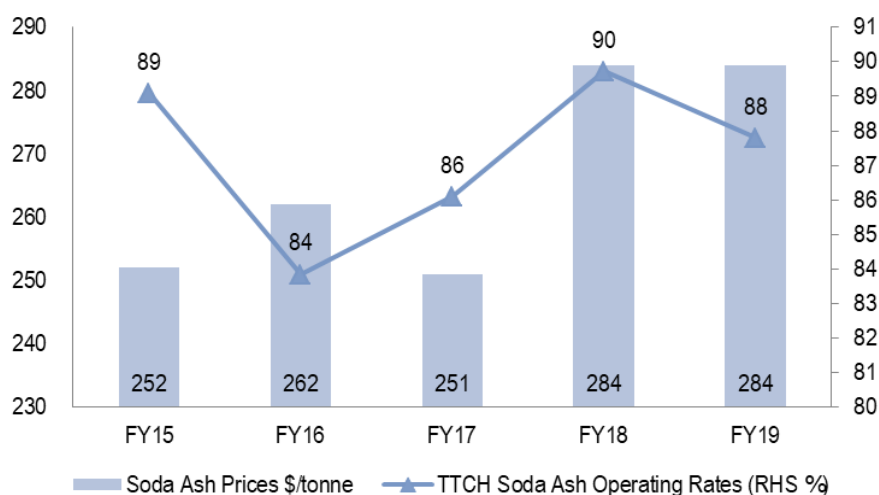
Source: Bloomberg

Key risks:

Upside surprise potential from earlier than expected upswing in soda ash cycle

The global economy could rebound faster than what we believe is possible once COVID-19 related disruption ends. The massive stimulus announced and the desire among people to make up for lost time could revive demand and supplies across sectors, including autos and construction, which are key for the soda ash business. Further, the nil capacity addition combined with normal demand growth of 3-4%, combined with potential capacity closures in the intervening periods, **set the stage for an upswing in the soda ash cycle** that could be steeper and longer lasting than our earlier expectation. ([Chemical Giant Leveraged To Soda Ash Upcycle-27 May 2019](#)).

Exhibit 1: Soda ash capacity utilization vs Soda ash price trend



Source: Company, Bloomberg, Nirmal Bang Institutional Equities Research

Downside risks:

Prolonged downturn in soda ash industry, especially in the US and EU, which are staring at the worst recession ever, with estimates of nearly 10% contraction in the US GDP in 2QCY20. This could hurt the prospects for TCNA and TCEL in terms of volumes and margins.

The added risk is potential threat of rating downgrade of its recent US\$380mn term loan and US\$25mn revolving credit facility, which could be triggered if EBITDA margins were to fall 600bps with no visibility on improvement, among other parameters used by the global rating agency S&P Global Ratings.

What could change for the better? :

- 5% upside in volumes implies 3% upside in EPS and 1.9% upside in TP in FY22E.
- If soda ash prices are higher by US\$10/t vs our est. implies 19.4% upside in EPS and 22.7% upside in TP.
- Announcement and visibility on investments in the complete EV battery ecosystem could help investors assess long term growth from an emerging high tech business which requires domain expertise in technology in lithium battery, active ingredients recycling, distribution and aftersales. The flip side is that the meltdown in global energy prices could stall current plans to invest in green technology, including EVs. In India, this may have a lesser impact and for project sponsors like TTCH this could mean lower capital cost as there could be a lull in capex on EV battery projects.
- Soda ash demand could get a fillip from single use plastic ban under discussion in India and other countries. This could potentially create additional demand for glass, especially for milk, which implies additional avenue of growth for soda ash in container glass segment under normal conditions.
- EV battery based on Li-carbonate salt could add to soda use in Lithium battery manufacturing. The exact impact on volumes is subject to debate as there is a competing hydroxide route which does not require soda ash, according to consultant HIS market.

Earnings and TP changes

We have cut our FY20E/FY21E/FY22E earnings by 13.2/71.9/50.8%, respectively and reduced our TP by 52.3% to Rs220. This implies a FY22E PE of 8.16x on EPS of Rs26.9, which is at a 22% premium to 5-year SD+1 PE of 6.7x. We downgrade to Accumulate based on our TP of Rs220, which offers 3.8% downside from CMP.

Exhibit 2: TTCH earnings revision

Rs Mn	Revised estimate			Earlier estimate*			% Revision		
	FY20E	FY21E	FY22E	FY20E	FY21E	FY22E	FY20E	FY21E	FY22E
Total Revenue	1,04,052	98,131	1,11,199	1,04,375	1,12,660	1,25,028	-0.3	-12.9	-11.1
EBITDA	19,769	11,891	18,434	20,827	22,991	27,434	-5.1	-48.3	-32.8
EBITDA margin (%)	19.00	12.12	16.58	19.58	20.67	19.53	-	-	-
PAT	8,308	3,089	6,874	9,575	10,993	13,974	-13.2	-71.9	-50.8
EPS	32.61	12.13	26.98	37.58	43.15	54.85	-13.2	-71.9	-50.8
TP		220			462			-52.3	

Note: *Ex consumer figures; Source: Nirmal Bang Institutional Equities Research

Exhibit 3: Segment wise details of Revenue and EBITDA

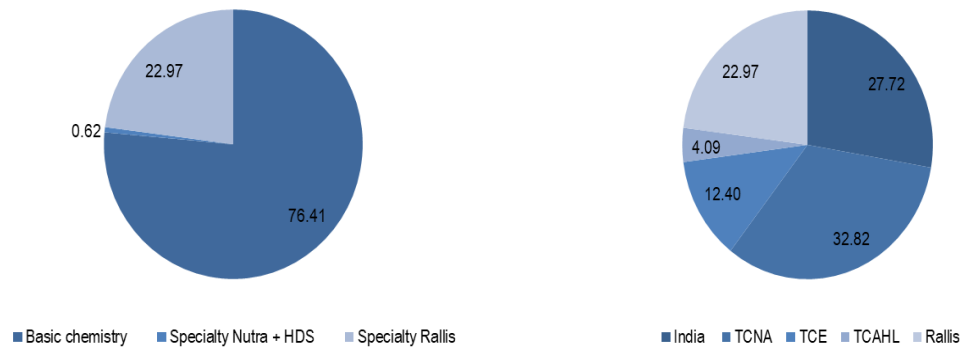
Rs Mn	FY19	FY20E	FY21E	FY22E
Segment Revenue				
Basic chemistry	83,105	79,506	69,894	78,306
Specialty Nutra + HDS	423	649	755	1,289
Specialty Rallis	19840	23,897	27,482	31,604
Total Revenue	103,367	104,052	98,131	111,199
Segment EBITDA				
Basic chemistry	15,363	15,346	9,756	14,702
Specialty	18	28	33	56
Rallis	2,409	2,985	2,103	3,677
Total	17,791	19,768	11,891	18,434

Segment EBITDA Margins %				
Basic chemistry	18.5	19.3	14.0	18.8
Specialty	4.3	4.3	4.4	4.3
Rallis	12.1	12.5	7.7	11.6
Total	17.2	19.0	12.1	16.6

Geographic wise Revenue				
India	30,157	28,840	27,882	34,726
TCNA	33,820	34,152	31,158	32,526
TCE	14,490	12,906	7,505	7,852
TCAHL	5,060	4,258	4,104	4,491
Rallis	19,840	23,897	27,482	31,604
Total Revenue	1,03,367	1,04,052	98,131	1,11,199
Geographic wise EBITDA				
India	6,971	7,726	6,550	9,981
TCNA	6,780	7,250	5,675	6,908
TCE	1,050	1,513	-2,257	-1,526
TCAHL	580	296	-179	-605
Rallis	2,410	2,984	2,103	3,677
Total EBITDA	17,791	19,768	11,891	18,434

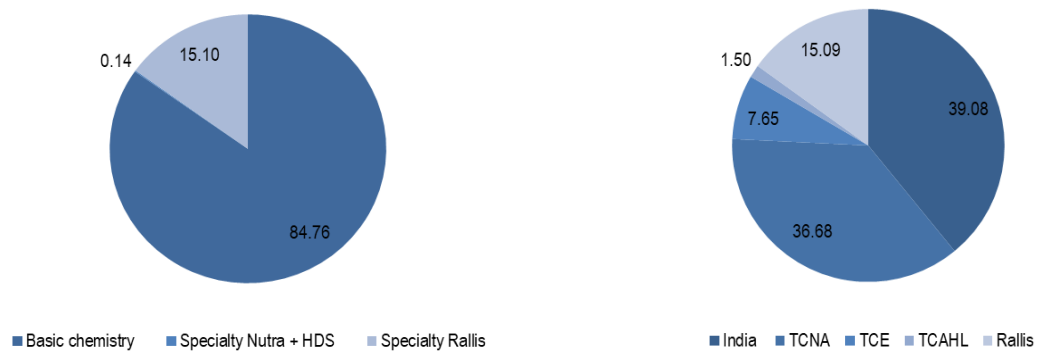
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 4: Segment and geographic revenue pie %FY20E



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 5: Segment and geographic EBITDA pie % FY20E



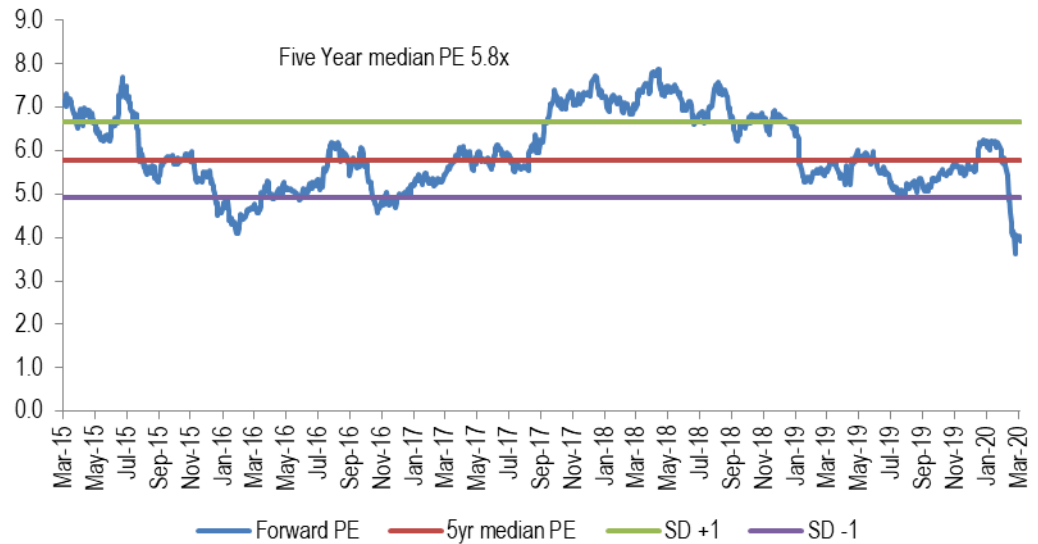
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 6: TTCH SOTP Valuation Summary based on FY22E

Chemicals	EV/E	FY22E EBITDA Rs Mn	EV Rs Mn	NET DEBT Rs Mn	EQUITY VALUE Rs Mn	IMPACT ON TP
	4	14,758	59,030	17,415	41,615	163
Specialty business	Market Cap.-Rallis	TTCH stake	Conglomerate Discount	TTCH shares Mn		
	36,220	50.06%	20%	255	-	57
TP Rs/sh						220
CMP Rs/sh						229
Downside %						3.8

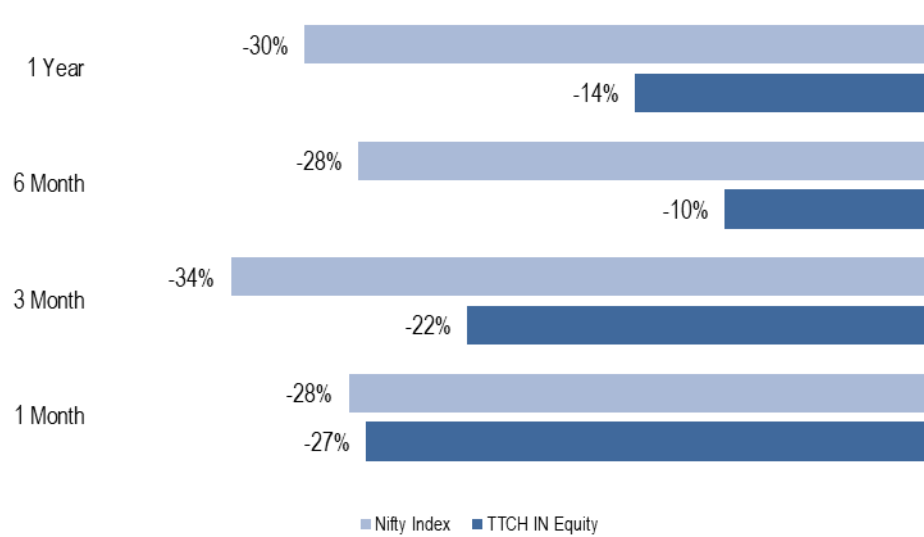
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 7: 5-year median PE Band



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 8: Stock performance chart %

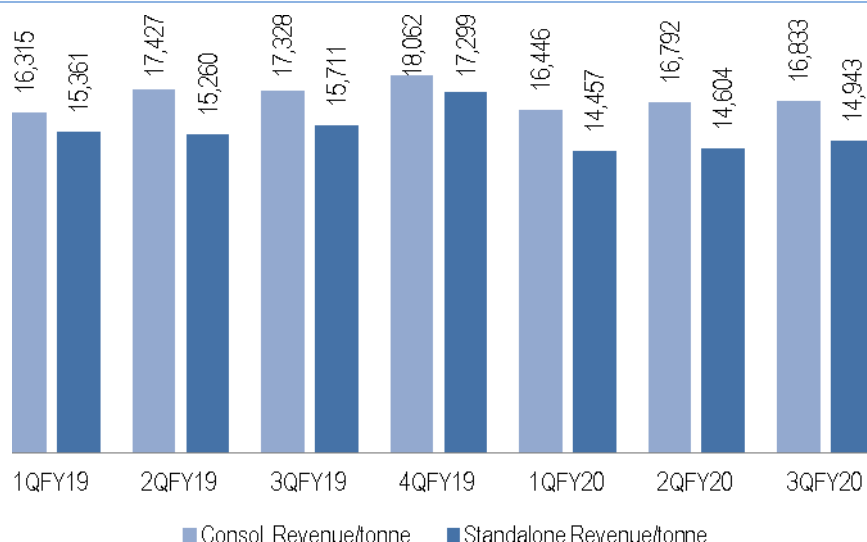


Source: Bloomberg, Nirmal Bang Institutional Equities Research

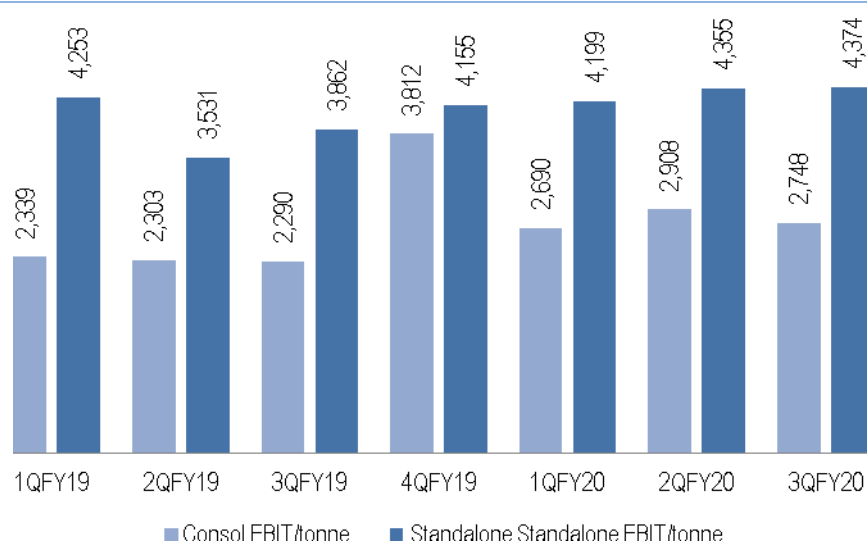
QUARTERLY RESULTS
Exhibit 9: Quarterly Analysis

Rs Mn	4QFY19	4QFY20E	YoY (%)	9MFY19	9MFY20	YoY (%)	FY19	FY20E	YoY (%)
Revenue	25,617	24,375	-4.8	77,753	79,677	2.5	1,03,367	1,04,052	0.7
EBITDA	4,463	4,315	-3.3	13,344	15,454	15.8	17,804	19,769	11.0
PAT	2,439	1,892	-22.4	6,179	6,416	3.8	8,615	8,308	-3.6
Margin Analysis %	4QFY19	4QFY20E	YoY (bps)	9MFY19	9MFY20	YoY (bps)	FY19	FY20E	YoY (bps)
Contribution	83	80	-271.4	80	80	-12.7	81	80	-77.0
EBITDA	17	18	27.7	17	19	223.4	17	19	177.4
EBIT	12	11	-92.7	12	13	141.3	12	13	87.2
PAT Margin	10	8	-18.5	8	8	1.3	8	8	-4.2
RM/sales	17	20	271.4	20	20	12.7	19	20	77.0

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 10: Chemistry segment Revenue/tonne Quarterly Trend


Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 11: Chemistry segment EBIT/tonne Quarterly Trend


Source: Company, Nirmal Bang Institutional Equities Research

Capex plan and initiatives

- Company has started the land filing work in the land secured for the greenfield manufacturing facility in Gujarat and is in continuous talks for potential partnership
- Rs26bn for expansion of capacity for Soda Ash and Salt through debottlenecking
- To spend Rs8bn on 2GW plant for lithium done in phases where Rs900-950mn of the committed capex will be done initially and timeline for the remaining spend to be done as per the demand

Exhibit 12: Peer comparison

	Code	CMP	EPS FY21E	PE(x) FY21E
SOLVAY SA	SOLB BB Equity	EUR 67.64	8.4	8.0
GHCL Ltd	GHCL IN Equity	Rs 99.7	45.3	2.2
Genesis Energy LP	GEL US Equity	USD 4.11	0.7	6.2
Ciech SA	CHX GR Equity	EUR 6.1	1.0	6.3
Sisecam	SISE TI Equity	TRY 4.3	0.9	4.6
Sanyou Chemical	600409 CH Equity	CNY 5.11	0.5	10.9
Average			9.5	6.4

Source: Company, Nirmal Bang Institutional Equities Research

Annexure - I: Subsidiary Rallis India (Not Rated)
Exhibit 13: Rallis summary financials

	FY18	FY19	FY20	FY21	FY22
Revenue	17909	19840	23897	27482	31604
Ebitda	2645	2409	2985	2103	3677
Net Profit	1676	1554	2058	1308	2371
EPS	8.62	7.99	10.58	6.73	12.19
<i>RM/sales %</i>	56.0	59.1	63.1	65.0	62.0
Ebitda margin	14.8	12.1	12.5	7.7	11.6
PAT margin	9.4	7.8	8.6	4.8	7.5
<i>RoCE- pre-tax</i>	20.3	16.1	17.4	9.7	17.7
<i>RoAe</i>	15	13	15	9	15
Growth %					
Rallis Revenue	7.7	10.8	20.5	15.0	15.0
EBITDA	0.3	-8.9	23.9	-29.6	74.9
Consolidated Net Profit Adj	20.5	-7.3	32.4	-36.4	81.2
EPS growth	20.5	-7.3	32.4	-36.4	81.2

Source: Company, Nirmal Bang Institutional Equities Research

Annexure – II: TTCH Exchange filing on COVID-19

Shutdown/ scale down of manufacturing operations at the company's plants due to outbreak of Coronavirus (COVID-19)

Ref: Intimation under Regulation 30 of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 (Listing Regulations).

In view of the outbreak of the Coronavirus (COVID-19) pandemic and in compliance with the directives / orders issued by the local Panchayat / Municipal Corporation / State / Central Government authorities and keeping in mind the safety and well-being of all the employees and stakeholders, the Company has, effective March 24, 2020:- a) shut down its manufacturing operations located at Mambattu-Nellore (Andhra Pradesh), Sriperumbudur (Tamil Nadu) and Cuddalore (Tamil Nadu); and b) scaled down its operations at Mithapur (Gujarat) for the production of soda ash and cement. We are striving to ensure normalcy in the production and movements of Tata Salt and sodium bicarbonate which are essential inputs for food and pharma products. The duration of this shut down/scale down is uncertain at this point in time and the resumption of operations at these locations will depend upon the directives issued by the respective Government authorities.

Consolidated financials

Exhibit 14: Income statement

Y/E March (Rsmn)	FY18	FY19	FY20E	FY21E	FY22E
Net Revenue	102,697	103,367	104,052	98,131	111,199
y/y	-0.74	10.00	-7.89	-5.69	13.32
Raw Material Expenses	17,555	20,020	20,953	27,452	31,054
RM/Sales %	17.1	19.4	20.1	28.0	27.9
Employee cost	12,702	13,185	13,586	14,487	15,140
Power and fuel cost	12,725	14,801	14,189	13,114	13,513
Selling, General & Admin	37,808	37,556	35,555	31,187	33,058
EBITDA	21,907	17,804	19,769	11,891	18,434
y/y	4.60	-18.73	11.03	-39.85	55.02
Depreciation	5,180	5,685	6,662	7,529	8,066
EBIT	16,727	12,119	13,107	4,363	10,368
Interest Expense	3,256	3,537	3,283	3,108	2,674
Other Income	1,595	4,095	3,271	3,500	3,500
PBT (adjusted)	15,066	12,677	13,094	4,755	11,194
- Income Tax Expense	601	2,744	2,487	1,046	2,463
Share of associates Profit/(loss)	492	992	294	294	294
Less Minority Interests	2,694	2,309	2,593	914	2,151
Consolidated PAT (adjusted)	12,263	8,615	8,308	3,089	6,874
Consolidated PAT reported	24,331	11,559	8,228	3,089	6,874
Diluted EPS (adjusted)	48.13	33.82	32.61	12.13	26.98
y/y	39.40	-29.74	-3.56	-62.82	122.52

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 16: Balance sheet

Y/E March (Rsmn)	FY18	FY19	FY20E	FY21E	FY22E
Equity Share Capital	2,548	2,548	2,548	2,548	2,548
Reserves and Surplus	108,469	120,222	125,997	127,557	132,393
Networth	111,017	122,770	128,545	130,106	134,942
Non controlling interest	27,172	29,147	31,740	32,654	34,805
Long Term Borrowings	53,940	47,829	70,880	54,990	53,320
Deferred Tax Assets / Liabilities	11,916	12,972	12,972	12,972	12,972
Other Long Term Liabilities/Provisions	17,709	16,203	16,203	16,203	16,203
Trade Payables	14,786	13,033	14,311	13,355	15,130
Other Current and financial Liabilities	17,478	17,043	6,967	6,967	6,967
Short Term Borrowings	1,402	3,525	0	0	0
Income tax liabilities	1,310	1,362	1,362	1,362	1,362
Short Term Provisions	2,058	2,803	2,574	2,352	2,811
Total Capital And Liabilities	258,786	266,686	285,554	270,959	278,510
Net Block	110,269	116,648	124,001	121,025	123,592
Goodwill on consolidation	17,319	18,590	18,590	18,590	18,590
CWIP plus IUD	4,089	7,738	9,476	11,081	5,935
Other Investments	27,765	33,901	33,901	33,901	33,901
Other Non Current Assets	8,950	11,189	11,189	11,189	11,189
Currents Investments	918	22,523	22,523	22,523	22,523
Inventories	14,623	14,893	15,323	14,023	16,048
Sundry Debtors	13,079	14,525	19,856	16,024	18,075
Cash and other cash balances	44,830	19,522	23,536	15,444	21,498
Advances & prepaid expenses	1,359	0	0	0	0
Statutory receivables	2,305	0	0	0	0
Other current assets	2,299	7,157	7,158	7,158	7,158
Assets classified as held for sale & discontinued operations	10,983	0	0	0	0
Total Assets	258,787	266,686	285,554	270,959	278,510

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 15: Cash flow

Y/E March (Rsmn)	FY18	FY19	FY20E	FY21E	FY22E
PBT	32,718	17,304	13,308	5,049	11,487
Add depreciation	5,960	5,685	6,662	7,529	8,066
Other adjustments	(9,139)	(213)	(515)	(686)	(1,120)
Change in W/C	5,691	2,144	4,714	(3,952)	1,841
Income tax	5,147	4,849	2,487	1,046	2,463
Cashflow from Operations (A)	18,701	15,784	12,255	14,798	14,130
Net Capex (inc in Tang and Intang assets)	(7,306)	(10,795)	(15,753)	(6,158)	(5,487)
Other Non Current Assets	33,450	(10,467)	0	0	0
Other income	926	1,681	0	0	0
Free cashflow	(8,369)	35,366	28,008	20,955	19,618
Cashflow from Investing (B)	27,070	(19,582)	(15,753)	(6,158)	(5,487)
Ch in Borrowing	(12,406)	(5,762)	9,450	(15,890)	(1,670)
Dividends paid including dividend tax	(3,362)	(6,725)	(2,453)	(1,529)	(2,038)
Interest exp	(3,243)	(2,939)	(3,283)	(3,108)	(2,674)
Others	(1,816)	(1,352)	3,798	3,794	3,794
Cashflow from Financing (C)	(20,827)	(16,778)	7,511	(16,732)	(2,588)
Ch in Cash and Cash equiv	24,945	(20,576)	4,014	(8,092)	6,055
Opening cash	14,515	39,459	18,884	22,898	14,805
Closing cash	39,459	18,884	22,898	14,805	20,860

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 17: Key ratios

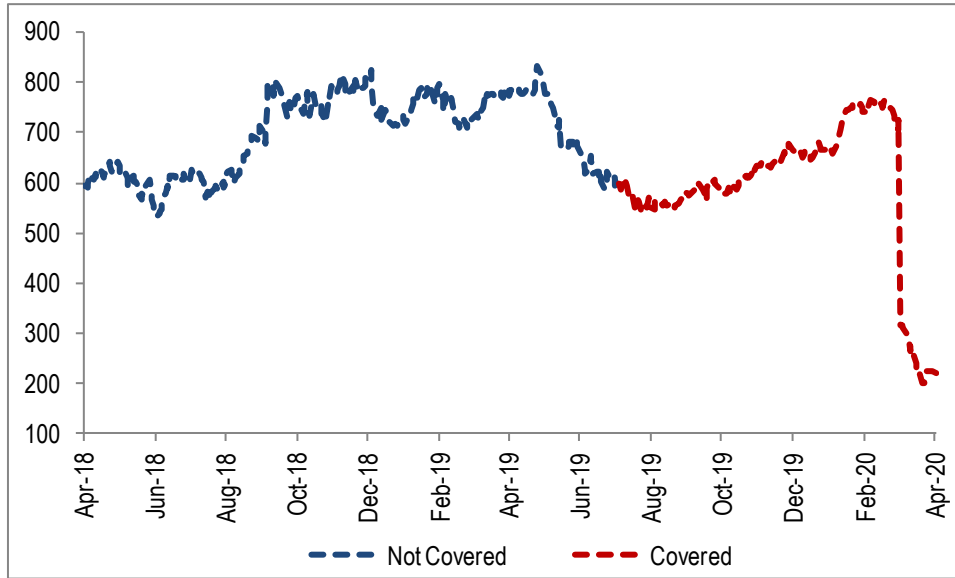
Y/E March (Rsmn)	FY18	FY19	FY20E	FY21E	FY22E
Profitability & return ratios					
EBITDA margin (%)	21.3	17.2	19.0	12.1	16.6
EBIT margin (%)	16.3	11.7	12.6	4.4	9.3
Adj Net profit margin (%)	11.9	8.3	8.0	3.1	6.2
RoE (%)	12.9	7.4	6.6	2.4	5.2
Pre-tax RoCE (%)	9.4	6.6	6.3	2.1	5.0
RoIC (%)	9.2	5.3	5.3	1.7	4.2
Working capital ratios					
Receivables (days)	60.4	48.7	69.7	59.6	59.3
Inventory (days)	50.6	52.1	53.8	52.2	52.7
Payables (days)	49.7	49.1	50.2	49.7	49.7
Cash conversion cycle	61	52	73	62	62
Leverage ratios					
Net debt (Rsmn)	-736	19,385	24,821	17,023	9,298
Net Debt (cash)/Equity (X)	0.0	0.1	0.2	0.1	0.1
Net Debt/EBITDA	-0.03	1.09	1.26	1.43	0.50
Valuation ratios					
EV/sales (x)	0.76	0.75	0.75	0.79	0.70
EV/EBITDA (x)	3.55	4.37	3.93	6.54	4.22
EV/FCF	4.2	4.9	6.3	5.3	5.5
P/E (x)	4.76	6.77	7.02	18.88	8.49
P/BV (x)	0.53	0.48	0.45	0.45	0.43
FCF Yield (%)	24.06	20.31	15.77	19.04	18.18
Dividend Yield (%)	4.80	5.46	3.49	2.62	3.49
Per share ratios					
EPS	48.1	33.8	32.6	12.1	27.0
Cash EPS	68.5	56.1	58.8	41.7	58.6
BVPS	435.8	481.9	504.6	510.7	529.7
DPS	11.0	12.5	8.0	6.0	8.0

Source: Company, Nirmal Bang Institutional Equities Research

Rating track

Date	Rating	Market price	Target price (Rs)
27 May 2019	BUY	636	750
9 August 2019	BUY	564	750
9 October 2019	BUY	577	743
1 November 2019	BUY	630	798
4 February 2020	BUY	751	897
8 April 2020	ACCUMULATE	229	220

Rating track graph



DISCLOSURES

This Report is published by Nirmal Bang Equities Private Limited (hereinafter referred to as “NBEPL”) for private circulation. NBEPL is a registered Research Analyst under SEBI (Research Analyst) Regulations, 2014 having Registration no. INH000001436. NBEPL is also a registered Stock Broker with National Stock Exchange of India Limited and BSE Limited in cash and derivatives segments.

NBEPL has other business divisions with independent research teams separated by Chinese walls, and therefore may, at times, have different or contrary views on stocks and markets.

NBEPL or its associates have not been debarred / suspended by SEBI or any other regulatory authority for accessing / dealing in securities Market. NBEPL, its associates or analyst or his relatives do not hold any financial interest in the subject company. NBEPL or its associates or Analyst do not have any conflict or material conflict of interest at the time of publication of the research report with the subject company. NBEPL or its associates or Analyst or his relatives do not hold beneficial ownership of 1% or more in the subject company at the end of the month immediately preceding the date of publication of this research report.

NBEPL or its associates / analyst has not received any compensation / managed or co-managed public offering of securities of the company covered by Analyst during the past twelve months. NBEPL or its associates have not received any compensation or other benefits from the company covered by Analyst or third party in connection with the research report. Analyst has not served as an officer, director or employee of Subject Company and NBEPL / analyst has not been engaged in market making activity of the subject company.

Analyst Certification: I, Amit Agarwal, research analyst and the author of this report, hereby certify that the views expressed in this research report accurately reflects my personal views about the subject securities, issuers, products, sectors or industries. It is also certified that no part of the compensation of the analyst was, is, or will be directly or indirectly related to the inclusion of specific recommendations or views in this research. The analyst is principally responsible for the preparation of this research report and has taken reasonable care to achieve and maintain independence and objectivity in making any recommendations.

Disclaimer

Stock Ratings Absolute Returns

BUY > 15%

ACCUMULATE -5% to 15%

SELL < -5%

This report is for the personal information of the authorized recipient and does not construe to be any investment, legal or taxation advice to you. NBEPL is not soliciting any action based upon it. Nothing in this research shall be construed as a solicitation to buy or sell any security or product, or to engage in or refrain from engaging in any such transaction. In preparing this research, we did not take into account the investment objectives, financial situation and particular needs of the reader.

This research has been prepared for the general use of the clients of NBEPL and must not be copied, either in whole or in part, or distributed or redistributed to any other person in any form. If you are not the intended recipient you must not use or disclose the information in this research in any way. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. NBEPL will not treat recipients as customers by virtue of their receiving this report. 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 NBEPL & its group companies to registration or licensing requirements within such jurisdictions.

The report is based on the information obtained from sources believed to be reliable, but we do not make any representation or warranty that it is accurate, complete or up-to-date and it should not be relied upon as such. We accept no obligation to correct or update the information or opinions in it. NBEPL or any of its affiliates or employees shall not be in any way responsible for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. NBEPL or any of its affiliates or employees do not provide, at any time, any express or implied warranty of any kind, regarding any matter pertaining to this report, including without limitation the implied warranties of merchantability, fitness for a particular purpose, and non-infringement. The recipients of this report should rely on their own investigations.

This information is subject to change without any prior notice. NBEPL reserves its absolute discretion and right to make or refrain from making modifications and alterations to this statement from time to time. Nevertheless, NBEPL is committed to providing independent and transparent recommendations to its clients, and would be happy to provide information in response to specific client queries.

Before making an investment decision on the basis of this research, the reader needs to consider, with or without the assistance of an adviser, whether the advice is appropriate in light of their particular investment needs, objectives and financial circumstances. There are risks involved in securities trading. The price of securities can and does fluctuate, and an individual security may even become valueless. International investors are reminded of the additional risks inherent in international investments, such as currency fluctuations and international stock market or economic conditions, which may adversely affect the value of the investment. Opinions expressed are subject to change without any notice. Neither the company nor the director or the employees of NBEPL accept any liability whatsoever for any direct, indirect, consequential or other loss arising from any use of this research and/or further communication in relation to this research. Here it may be noted that neither NBEPL, nor 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 profit that may arise from or in connection with the use of the information contained in this report.

Copyright of this document vests exclusively with NBEPL.

Our reports are also available on our website www.nirmalbang.com

Access all our reports on Bloomberg, Thomson Reuters and Factset.

Team Details:			
Name		Email Id	Direct Line
Rahul Arora	CEO	rahul.arora@nirmalbang.com	-
Girish Pai	Head of Research	girish.pai@nirmalbang.com	+91 22 6273 8017 / 18
Dealing			
Ravi Jagtiani	Dealing Desk	ravi.jagtiani@nirmalbang.com	+91 22 6273 8230, +91 22 6636 8833
Michael Pillai	Dealing Desk	michael.pillai@nirmalbang.com	+91 22 6273 8102/8103, +91 22 6636 8830

Nirmal Bang Equities Pvt. Ltd.

Correspondence Address

B-2, 301/302, Marathon Innova,
 Nr. Peninsula Corporate Park,
 Lower Parel (W), Mumbai-400013.

Board No. : 91 22 6273 8000/1; Fax. : 022 6273 8010