

# Star Cement

Refer to important disclosures at the end of this report

## Niche play on North East region

<b>CMP</b>	<b>Target Price</b>
Rs 124 as of (February 5, 2018)	Rs 170 12 months
<b>Rating</b>	<b>Upside</b>
BUY	37.0 %

- Star Cement Ltd (Star) is the largest cement manufacturer in the North East with a market share of 23%. It has consistently delivered more than 2x EBITDA/tonne vis-à-vis the average of other companies in our coverage universe.
- Extensive dealership network, premium pricing, low competition, cost advantages and fiscal incentives help Star to generate superior profits. RoE and Net D/E are also among the best in our coverage universe.
- North East region, where Star sells 65% of its volume, is a lucrative market with low competition (50% of capacity is controlled by two players), and has significant growth opportunities. We expect capacity utilization of cement manufacturers in this region to improve during FY17-20E.
- We expect EBITDA/Adj. PAT CAGR of 14.4%/33.9over FY17-20E, with RoE of 20.7% in FY20E against 15% in FY17. We value Star at 10x FY20E EV/EBITDA and initiate coverage with a BUY rating and PT of Rs170.

### Largest player in NE with one of the highest profitability in the sector

Star is the largest cement player in the North East with cement grinding capacity of 4.4mtpa and market share of 23%. 50% of North East market is being controlled by top 2 players. The company has an extensive dealership network with ~2,600 dealers spread across 11 states in East India. Further, the brand "STAR" commands premium pricing (Rs30-40/bag higher than B/C category brands). Premium pricing, lower competition, cost advantages (high grade limestone and captive power plants) and fiscal incentives (incentives/tax exemptions) help Star to generate superior profitability (average EBITDA/tn of Rs1,547 during FY14-FY17).

### Regional advantage: NE a big thrust area for Union Government

North East and East regions are under-penetrated cement markets with per capita cement consumption of 131kg against the national average of 201kg. The Government of India has given a lot of thrust on infrastructure development in the North East through its 'Act East Policy'. With GoI's continued focus on infrastructure development - construction of 300km of border gate in Arunachal Pradesh, conversion of two lanes road into four lanes, Hydro Power projects, this region presents significant growth opportunities for cement companies.

### Initiate coverage with BUY

We expect Star to post a 33.9% earnings CAGR over FY17-FY20E led by higher sales volume and realizations. OPM is expected to improve by 649bps in FY20E compared to FY17. It has consistently delivered more than 2x EBITDA/tn than average of other companies under our coverage universe led by presence in a lucrative market and fiscal incentives. RoE and Net D/E of the company is also one amongst the best under our coverage universe. It trades at 10.5x/9.1x/6.9x FY18E/FY19E/FY20E EV/EBITDA (ex- CWIP). We believe that the stock deserves a re-rating considering strong fundamentals and value it at 10x FY20E EV/EBITDA to arrive at a PT of Rs170, upside of 37%. We initiate coverage on Star with a Buy rating. Key risks could be lower demand in its key markets and delay in disbursement of incentives.

### Financial Snapshot (Consolidated)

(Rs mn)	FY16	FY17	FY18E	FY19E	FY20E
Revenue	17,150	17,280	16,028	17,963	20,329
EBITDA	3,994	4,088	5,097	5,231	6,128
EBITDA Margin (%)	23.3	23.7	31.8	29.1	30.1
APAT	1,346	1,716	2,955	3,239	4,118
EPS (Rs)	3.2	4.1	7.1	7.7	9.8
EPS (% chg)	(14.5)	27.5	72.2	9.6	27.2
ROE (%)	15.5	15.0	21.7	19.6	20.7
P/E (x)	38.6	30.3	17.6	16.0	12.6
EV/EBITDA (x)	15.3	14.6	10.7	10.2	8.5
P/BV (x)	4.9	4.2	3.5	2.9	2.4

Source: Company, Emkay Research, ^ex-CWIP it trades at 9.1x/6.9x FY19E/FY20E EV/EBITDA

<b>Change in Estimates</b>	
EPS Chg FY18E/FY19E (%)	NA
Target Price change (%)	NA
Target Period (Months)	12
Previous Reco	NA

<b>Emkay vs Consensus</b>		
<b>EPS Estimates</b>		
	<b>FY18E</b>	<b>FY19E</b>
Emkay	7.1	7.7
Consensus	6.2	5.7
Mean Consensus TP (12M)	Rs 159	

<b>Stock Details</b>	
Bloomberg Code	STRCEM IN
Face Value (Rs)	1
Shares outstanding (mn)	419
52 Week H/L	152 / 102
M Cap (Rs bn/USD bn)	52 / 0.81
Daily Avg Volume (nos.)	7,46,217
Daily Avg Turnover (US\$ mn)	1.5

<b>Shareholding Pattern Dec '17</b>	
Promoters	73.3%
FIIIs	2.0%
DIIIs	2.7%
Public and Others	22.1%

<b>Price Performance</b>				
(%)	<b>1M</b>	<b>3M</b>	<b>6M</b>	<b>12M</b>
<b>Absolute</b>	(12)	7	(4)	-
<b>Rel. to Nifty</b>	(13)	4	(10)	-



Source: Bloomberg

This report is solely produced by Emkay Global. The following person(s) are responsible for the production of the recommendation:

**Sanjeev Kumar Singh**  
sanjeev.singh@emkayglobal.com  
+91 22 66121255

**Sandeep Dubey**  
sandeep.dubey@emkayglobal.com  
+91 22 66121285

## Leadership position in the North East region

Star has installed clinker capacity of 2.6mt and cement grinding capacity of 4.4mt (including lease based grinding units) spread across Assam, Meghalaya and lease-based grinding units in West Bengal. Star started its production in FY05 with a cement grinding capacity of 0.4mt and has grown by 10x in the last 12 years.

### Exhibit 1: Installed capacities

Cement plants	Location	Clinker capacity (mt)	Cement capacity (mt)
Star Cement Meghalaya Ltd.	Lumshnong, Meghalaya	1.8	
Mega Technical & Engineers Pvt Ltd.	Lumshnong, Meghalaya		0.7
Cement Manufacturing Company Ltd.	Lumshnong, Meghalaya	0.7	0.9
Cement Manufacturing Company Ltd.	Guwahati, Assam		2.0
Own capacities		2.6	3.7
Lease based grinding units	West Bengal		0.7
<b>Total capacities</b>		<b>2.6</b>	<b>4.4</b>

Source: Company, Emkay Research

The North East market is fairly concentrated with two major producers (Star and Dalmia group - Calcom/Adhunik) having more than 50% share of installed capacities and top 5 players capturing more than 80% market share. Many of the smaller players in the region are not able to stabilize their capacities due to infrastructure issues/fund crisis. Also, they have to purchase clinker from outside the North East region in the peak season, giving pricing power to cement manufacturers in the region.

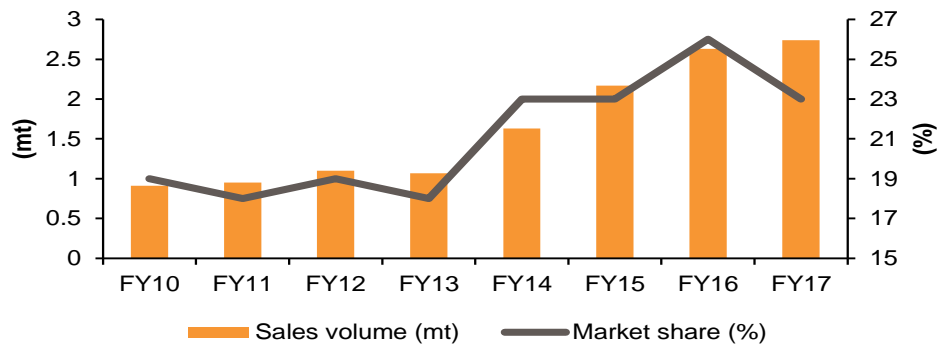
### Exhibit 2: Installed capacities in NE

Cement companies/plants in NE	Location	Brand	Cement capacity (mt)	Capacity share (%)
Star Cement	Meghalaya & Assam	Star Cement	3.7	30.6
Dalmia- Calcom and Adhunik	Meghalaya & Assam	Dalmia	3.2	26.7
Meghalaya Cement	Meghalaya	TOPCEM	1.2	9.8
Amrit Cement	Meghalaya	Amrit	1.0	8.3
Goldstone Cements	Meghalaya	Goldstone	1.0	8.3
Green Valley	Meghalaya	Max	0.6	5.0
Hills Cement Company	Meghalaya	Taj	0.3	2.5
JUD	Meghalaya	Best Cement	0.3	2.5
Barak Cement	Assam	Valley Strong	0.4	3.1
CCI Ltd.	Assam		0.2	1.7
Mawmulah-Cherra Cement	Meghalaya		0.2	1.7
<b>Total installed capacities</b>			<b>12.1</b>	

Source: Company, Emkay Research, Industry

Star enjoys a *numero uno* position in the North East market. Over the years, it has improved its market share in this region with the help of a strong dealer and distribution network. It has increased its market share from 18% in FY13 to 23% in FY17. With the recent increase in grinding capacity by 0.4mt, Star has scope to further improve its market share.

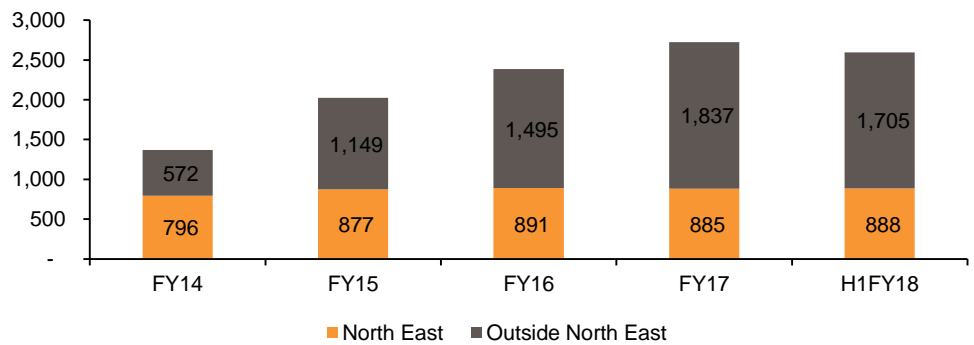
**Exhibit 3: Market share improved in FY17 compared to FY13**



Source: Company, Emkay Research

Star’s distribution network is spread across 11 states, which helps it to penetrate deeper into the rural areas, gives greater reach and a higher market share. With an aim to improve sales volume outside the North East markets, it has increased the dealer count in West Bengal, Bihar and Jharkhand (from 572 in FY14 to 1,705 in H1FY18).

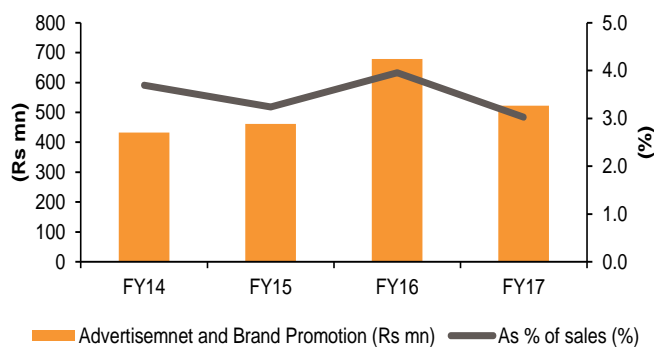
**Exhibit 4: Strong dealers network built over the years**



Source: Company, Emkay Research

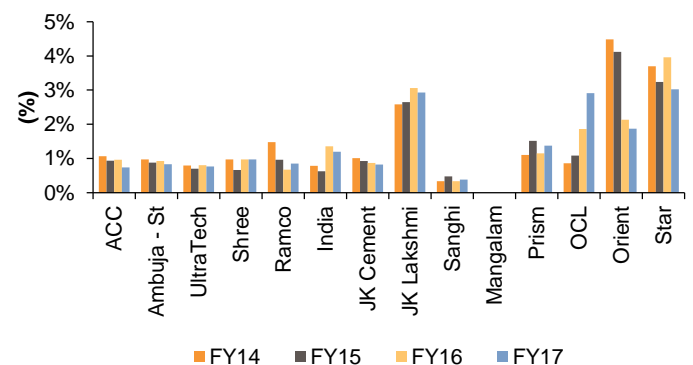
Star has attained high penetration and impressive brand recall by regular investments in branding (cumulative brand investment of Rs2.5bn in last decade and aggressive campaign for brand launch outside North East markets). Many celebrities are endorsing its brands, viz Debojit Saha (Bengali singer and past winner of Zee TV’s reality series Sa Re Ga Ma Pa Challenge 2005), Saurabhee Debbarna (a contestant in the 4th series of Indian Idol, where she became the first female Indian Idol winner), Lou Majau (a performing artist from Shillong in North East India and is renowned for his Bob Dylan tribute shows) etc.

**Exhibit 5: Continuous investments in branding**



Source: Company, Emkay Research

**Exhibit 6: Advertisement spend as % of sales of cement companies**

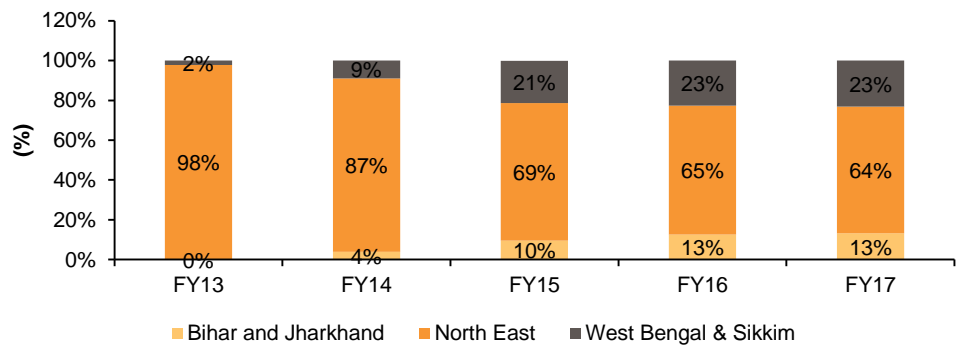


Source: Company, Emkay Research

### Diversification of sales to other neighboring states

Over the last few years, Star has diversified its sales into other adjoining states, primarily into West Bengal, Bihar and Jharkhand, with the help of an extensive distribution network built outside the North East markets. Star's sales in the North East region declined to 64% of total sales in FY17 from 98% in FY13. The management is planning to set up a new grinding unit in Siliguri, which will further help it to strengthen its sales outside the North East markets. Going forward, sales are expected to remain at ~60-70% of total sales in its core North East markets (excluding Sikkim).

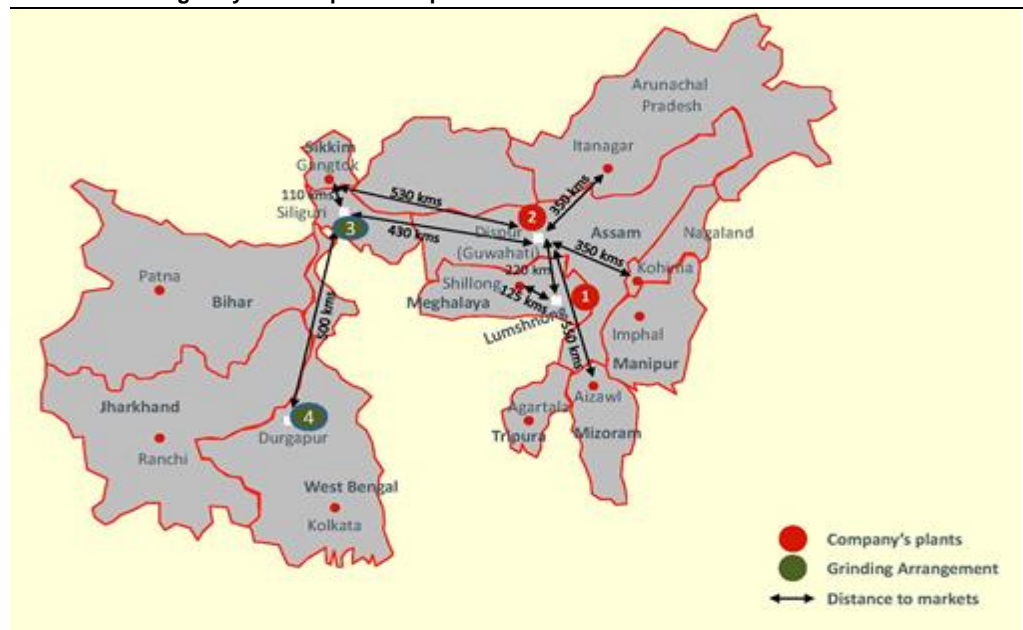
**Exhibit 7: Improvement in sales outside North East markets**



Source: Company, Emkay Research

### Cement plant locations and distance from key markets

**Exhibit 8: Strategically located plants help to serve outside North East markets**



Source: Company, Emkay Research, \*map not measured to the scale

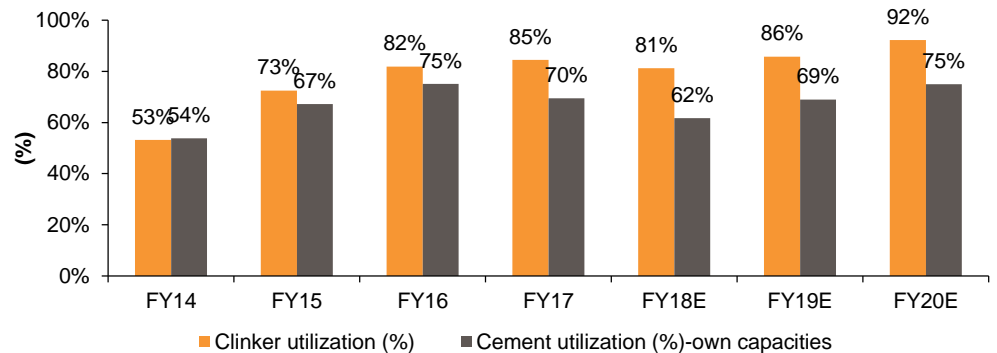
### Clinker utilization should reach 90%+ in FY20E; next leg of capex under consideration

Star had expanded its clinker capacity by 1.8mt to 2.6mt in the beginning of FY14. It had also commissioned a split grinding unit of 1.8mt capacity (current capacity - 2mt) in Guwahati, Assam. In FY17-end, it increased its grinding capacity at the Lumshnong plant by 0.4mt, taking its own grinding capacity to 3.7mt.

The company's clinker utilization rate has been in excess of 80% over the last few years post the ramp-up of the capacity commissioned at the start of FY14. In FY18, clinker utilization is expected to decline to 82% from 85% in FY17 due to lower volume in Q2FY18 as: a) floods hurt in North East/West Bengal/Bihar markets and b) lower sales from leased grinding units (as a conscious effort to improve profit as cement prices continued to remain under pressure in West Bengal). We expect Star's clinker utilization rate to improve to 86%/92% in FY19E/FY20E from 81% in FY18E.

We believe that the Star management is actively considering the next leg of capacity expansion, as the demand is expected to remain firm in its core markets. The plan to set up a grinding unit in Siliguri, West Bengal with a capacity of 1.5-2mt is under active consideration. We believe that with the announcement of this grinding unit, the Star management will chalk out some fresh plans to increase its clinker capacity at the existing location.

**Exhibit 9: Improvement in clinker and cement utilization rate**



Source: Emkay Research, Company

### Subsidies boost profit for NE players; freight subsidy expiry impact already factored in

Govt gives incentives for investments in the North East region with a purpose to boost industrial activities in the region. As of now, the North East Industrial and Investment Promotion Policy, 2007 (NEIIPP 2007) is in place, which was formulated for 10 years.

Star too enjoys a host of subsidies and exemptions under NEIIPP. It had expanded its clinker capacity at the start of FY14. At the same time, it had commissioned a new grinding unit. Though Excise/VAT incentives are still available for 6 years/3 years, freight incentives got over in Jan-18, which will have an impact of Rs300-350/tn on operating profit. The company has already made a conscious decision to reduce its sales from leased grinding units in West Bengal, as it will not be lucrative to cater to few markets in the state post the expiry of freight incentives. We believe that the impact of expiry of freight subsidies is already factored in and the cement manufacturers in the region would try to increase cement prices in the next few months.

**Exhibit 10: Incentives for Star Cement**

Particulars	Exemption	SCML	SCL-GGU	SCL-LMS	MTEPL
		Balance exemption periods**			
Income tax	100% under Section 80IE, subject to MAT	5 years	5 years		1 year
Excise duty on clinker	75%	6 years	-	10 years	-
Excise duty on cement	75%/36% ^	-	6 years	10 years	-
Central sales tax	99%	3 years			
VAT	99% ^^	3 years #	Rs138crs#/3 years		
Freight subsidy					
Inward					
Within NER	90%				
Outside NER	90%				
Outward (till Jan-18)		1 year	1 year		
Within NER	50%				
Outside NER	50%				
Capital Investment subsidy	30% of investment in plant & machinery	One time	One time		

Source: Company, Emkay Research, \*\* As on 31/03/2017, ^ At GGU unit, VAT exemption is 99% up to 200% of FCI. Excise benefits for cement: 75% for integrated units and 36% for standalone grinding units

**Exhibit 11: Impact of incentives on operating profit/other benefits**

NEIIPP 2007 incentives	Impact on operating profit / benefits (Rs/tn)	Benefits available till
Excise duty	100-150	FY23-FY27
VAT	150-200	FY20
Freight subsidy	300-350	Jan-18
Capital subsidy	30% of capital investment- Rs2bn (one-time)	received in FY18 (reflected in accounts receivables in FY17)

Source: Company, Emkay Research

**Capital subsidy received in FY18; release of other subsidies a near-term positive**

Star had pending subsidies of ~Rs9bn at FY17-end, as there have been a delay in disbursements of subsidies post FY14 (after the formation of new Central government). Out of the total Rs9bn subsidies, Rs2.1bn was towards capital subsidy, which the company received in Q1/Q3FY18. We expect disbursements of the remaining subsidies to start from FY19E, which will act as a catalyst for stock performance in the near term.

**Exhibit 12: Capital subsidy received, other subsidies still pending**

(Rs mn)	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E	FY20E
Capital subsidy	2,272	2,122	2,122	2,122	2,128	-	-	-
Centre/State Govt claims/subsidy	954	1,366	2,440	4,395	6,185	6,174	5,019	3,431
Bal with Government	320	961	669	582	759	740	719	713
<b>Total</b>	<b>3,546</b>	<b>4,449</b>	<b>5,231</b>	<b>7,099</b>	<b>9,072</b>	<b>6,914</b>	<b>5,738</b>	<b>4,144</b>

Source: Union Budget of India, Emkay Research

In the recently announced Union Budget for 2018-19, there has been upwards revision in allocation under North Eastern Industrial and Investment Promotion Policy (NEIIPP) and Transport/Freight Subsidy Scheme for 2017-18 which in our view, would result in disbursement of pending subsidies.

**Exhibit 13: Allocation for incentives in the Union Budget**

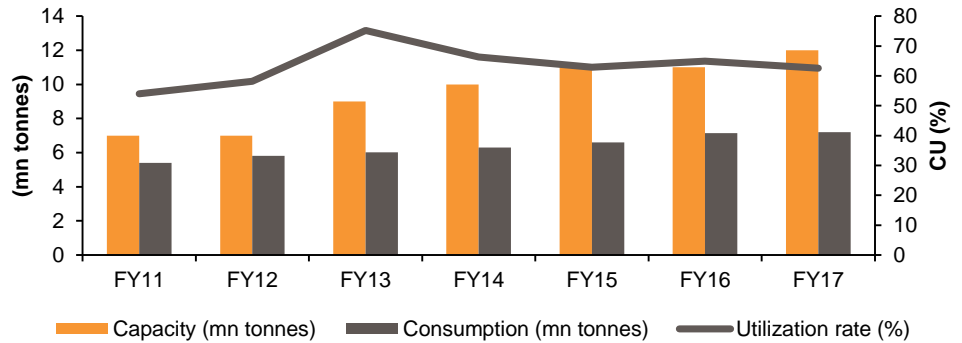
Particulars (Rs mn)	2016-17	2017-18 (budget est.)	2017-18 (revised est.)	2018-19 (budget est.)
NEIIPP	1,700	6,000	7,830	5,280
Transport/Freight Subsidy Scheme	700	2,937	6,000	4,000

Source: Company, Emkay Research

## North East: a difficult market to cater to for outside players...

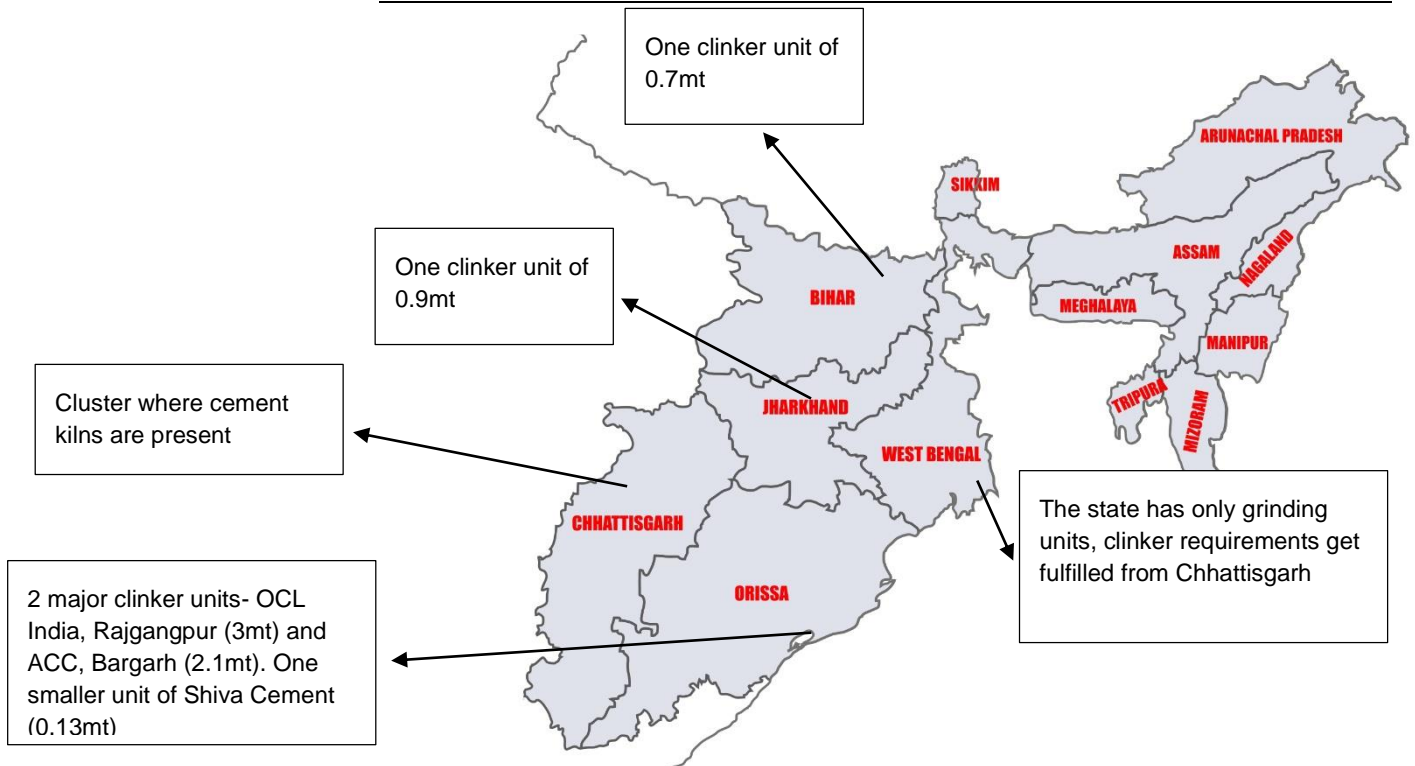
Cement players from the mainland markets find it difficult to cater to the North East region due to logistics bottlenecks and non-availability of clinker units. In the East region, clinker units are located mostly in Chhattisgarh and players in other states of the region are dependent on split grinding units (with sourcing of clinker done from Chhattisgarh). Over the last few years, cement arrivals in the North East region from the mainland players have fallen to 14% from 30%, which has helped the North East players in achieving better pricing power. No new capacities are planned in this region as of now. Hence, with improvement in demand, the utilization rate of existing North East players should improve going forward.

**Exhibit 14: Historical demand-supply dynamics of North East region**



Source: Company, Emkay Research

**Exhibit 15: North East region's access is not easy for outside players**



Source: Emkay Research, \*map not measured to the scale

### .... with strong demand drivers in place....

North East India, which comprises 8 states, viz. Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim, is geographically connected to the rest of the country by a narrow corridor of land, flanked by Nepal and Bangladesh. For decades, poor infrastructure and limited connectivity have acted as major roadblocks, hindering the socio-economic development of these states.

Referred to as ‘*Ashtalaksmi*’ of India, the North East states have been recognized as a gateway to South East Asia. Japan has expressed its desire to offer support to India for developing infrastructure in the North East region.

Gol’s ‘Act East Policy’ focuses on strengthening relations with the neighboring countries and it is spearheading initiatives to enhance connectivity through various infrastructure projects pertaining to Road, Rail, Air, Telecom, Power and Waterways.

### Gol’s thrust on infrastructure development in NE

**Roads:** The Special Accelerated Road Development for North East (SARDP-NE) and National Highway Development Programmes (NHDP) in NE to build 10,141 kms of roads at an estimated cost of Rs335bn. Out of this, approval for 5,532kms have already been executed.

**Airports:** 5 sanctioned, 8 in the pipeline; Rs50bn of investments over the next 10 years.

**Railways:** 20 ongoing new lines, gauge conversion and double line projects are being executed at a cost of Rs384bn.

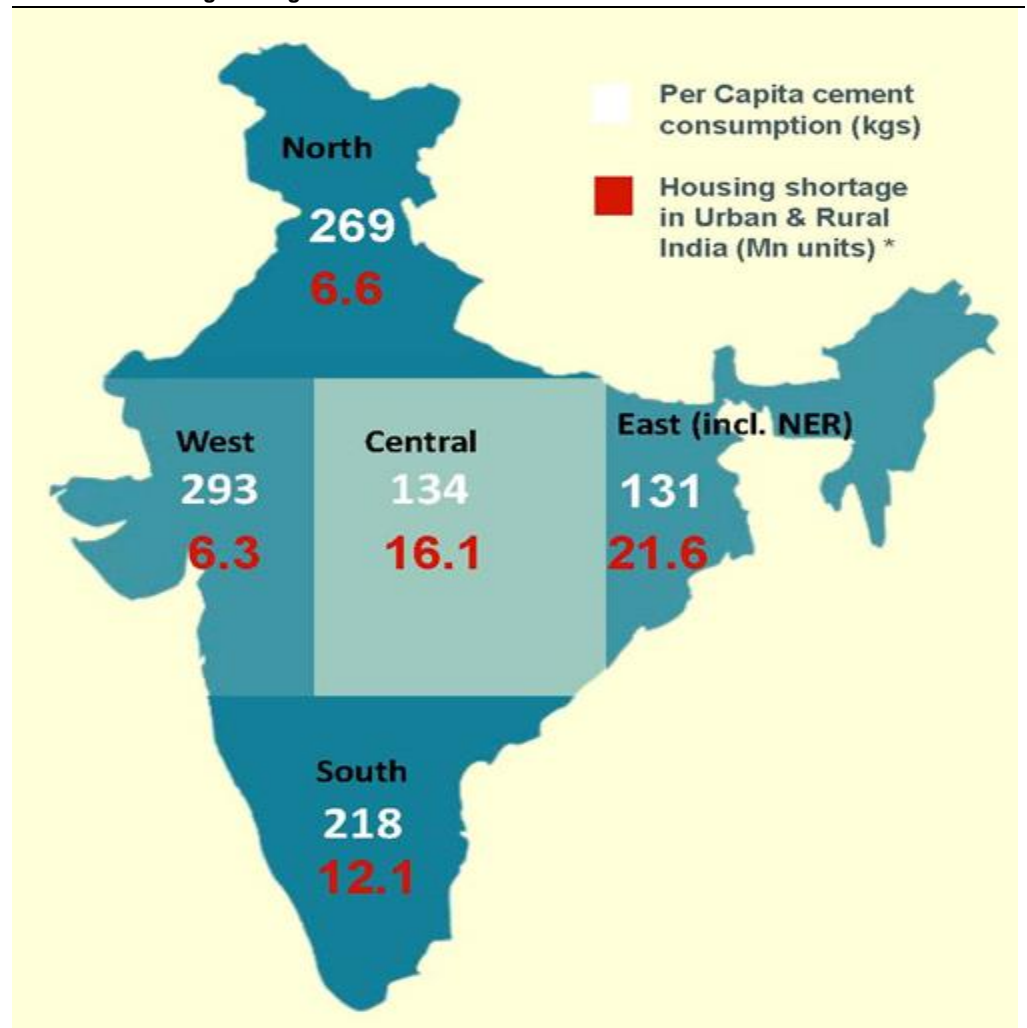
**Hydropower:** Largest hydro power potential in India in NE with 98% still untapped; 63,000MW of hydro capacity identified and 14,000MW already allotted to private players. This will result in 14mt of cement demand.

**Smart Cities:** One city in each of the NE states is part of the project.

**Railway connectivity:** The Railway Ministry plans to connect all NE state capitals and to augment network capacity to handle traffic growth in the future. Initiatives are also on the anvil to expand the existing network to connect the interior regions of the North East region.

### Housing shortage is the highest in East region

Exhibit 16: Housing shortage across India



Source: Company, Emkay Research



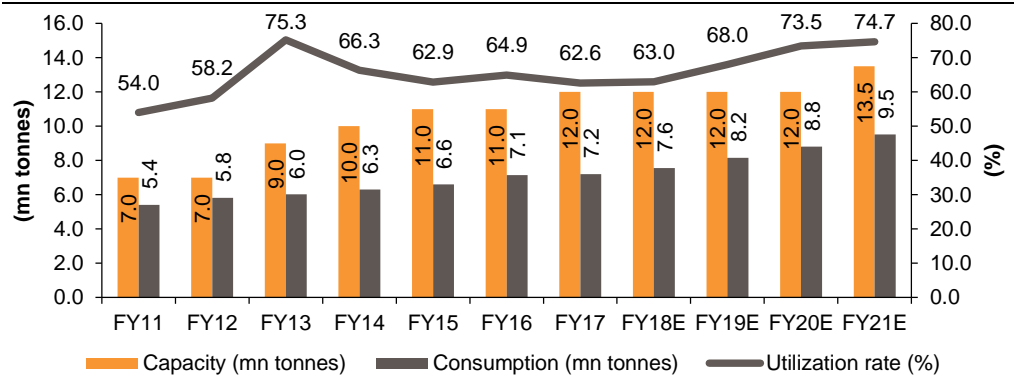
### .....which will lead to improved capacity utilization and better pricing power

Cement consumption in the North East region has grown at a CAGR of 5% during FY11-FY17 (flat growth in FY17). We believe that Gol's thrust on infrastructure development in the North East region and schemes like "Housing for All" would boost cement consumption in the region. Gol has also laid special focus on rural and semi-urban areas of the North East region through large infrastructure and housing development projects.

Of the total housing shortages in urban India, the East region alone accounts for 35%. East and Central regions put together account for ~60% of all India Urban and Rural housing shortages. East India (including NE) accounts for urban/rural housing shortages of 4.3mn units/ 17mn units. Per capita cement consumption in East India is among the lowest (131kg against the national average of 210kg per year), representing a huge potential for growth going ahead.

We expect cement demand to grow at a CAGR of 8% over the next few years, which would help to improve utilization rates of the cement manufacturers of the region. With no new capacities planned in the region (Star's next phase of expansion is under planning stage) and expectation of demand improvement going ahead, we expect capacity utilization of the North East cement players to improve to 74.7% in FY21E (we have considered 1.5mt of grinding unit by Star to be commissioned by FY20-end) against 62.6% in FY17. Improvement in capacity utilization would also offer better pricing power to cement manufacturers in the North East region.

**Exhibit 17: Improvement in capacity utilization of cement manufacturers in North East**



Source: Company, Emkay Research, Industry

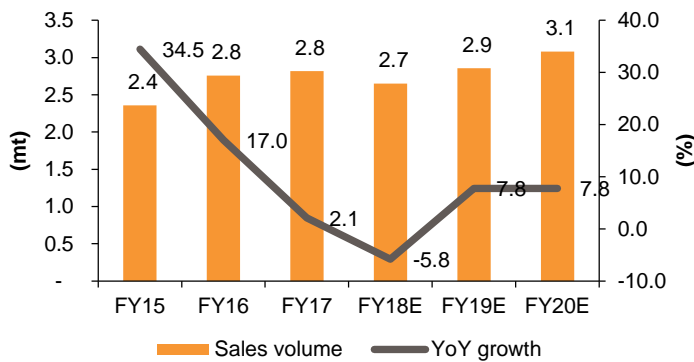
## Financial Analysis

### Volume and realization growth assumptions

Post increase in clinker and grinding capacities in FY13-end, sales volume of Star increased at a CAGR of 37.3% during FY13-FY16. Announcement of demonetization by GoI in Nov'16 affected cement demand across the country and the volume growth for the company stood at a modest 2.1% in FY17. Again in FY18, sales volume have been adversely impacted due to floods in West Bengal and North East markets. Also, the company's strategy to reduce sales in few less profitable markets (volume from lease based grinding units was at 0.12mt in H1FY18 against 0.42mt in FY17) has affected volume in YTD FY18 (a drop of 14% yoy in sales volume in H1FY18). The management remains confident of achieving significantly higher volume in Q4FY18. But, we have considered a drop of 5.8% yoy in sales volume for FY18. Going forward, we have considered a volume growth of 7.8% yoy each for FY19E/FY20E (grey cement volume growth of 8% yoy and flat clinker volume).

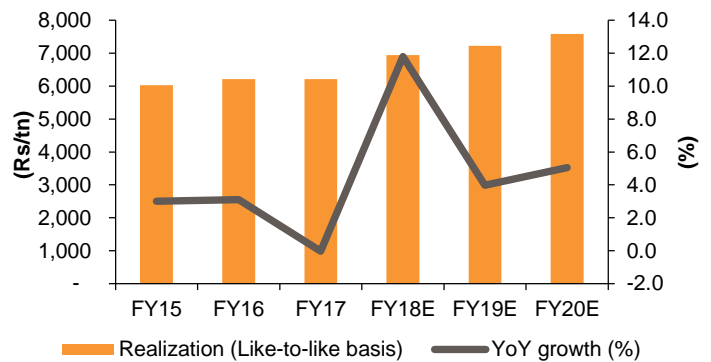
Post Q2FY17, there have been significant improvement in the company's realization with H1FY18 realization growth coming in strong at 16.9% yoy. We have factored in 11.8% yoy realization growth in FY18 (on a like-to-like basis as there has been change in reporting standards post Ind-AS implementation in FY18). Going forward, we have assumed 4%/5% yoy realization growth in FY19E/FY20E, as we expect better demand growth and higher capacity utilization in the North East region.

**Exhibit 18: Sales volume to grow at a CAGR of 3% between FY17-FY20E**



Source: Company, Emkay Research

**Exhibit 19: Realization CAGR assumed at 6.9% between FY17-FY20E**

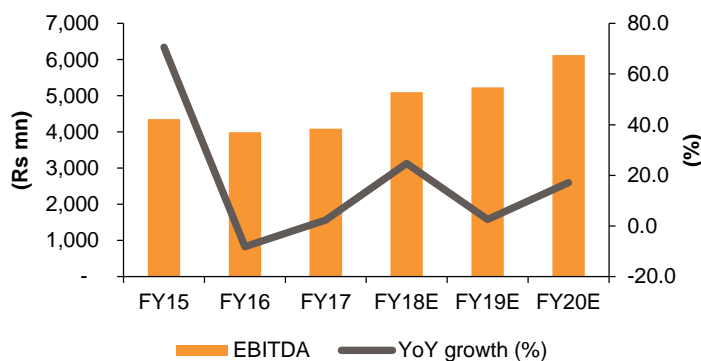


Source: Company, Emkay Research

### Higher realization would lead to better earnings growth

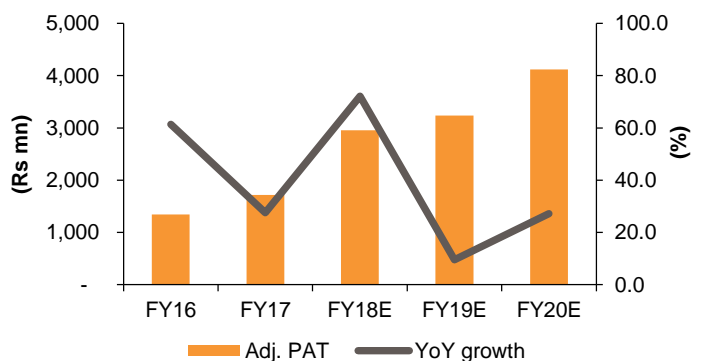
Revenue is expected to grow at a CAGR of 10.1% over FY17-20E on the back of growth in sales volume and realization. Driven by revenue growth, we expect EBITDA/ net profit to grow at a CAGR of 14.4%/33.9% over FY17-FY20E. Our estimate of EBITDA growth in FY19E is a mere 2.6% yoy, as we expect margins to compress due to the expiry of freight incentives in Jan'18.

**Exhibit 20: EBITDA CAGR of 14.4% over FY17-FY20E**



Source: Company, Emkay Research

**Exhibit 21: Adj. profit to grow at a CAGR of 33.9% over FY17-20E**



Source: Company, Emkay Research

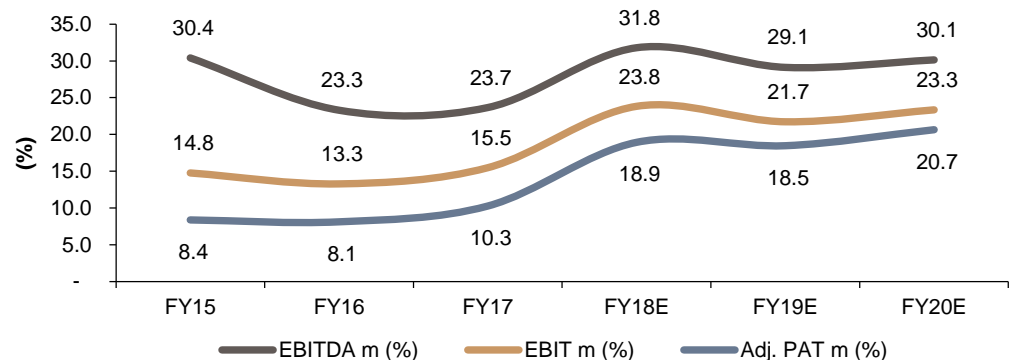
### Margins to improve over FY17

EBITDA margin declined during FY15-FY17 on account of new capacity addition in the North East region (Dalmia Bharat had expanded clinker capacity of Calcom in FY15 and Star too was aggressive in volume growth post capacity expansion in FY13-end). Led by 16.9% yoy realization growth in H1FY18, EBITDA margin improved by 1185bps to 33.2% in H1FY18. We expect EBITDA margin improvement of 815bps yoy to 31.8% in FY18E. Going forward, we expect OPM to decline by 268bps yoy in FY19E, as the expiry of freight incentives would result in higher freight costs. We have factored in 102bps yoy margin improvement in FY20E. During FY17-FY20E, OPM should improve by 649bps.

EBIT margin is expected to improve by 833bps yoy in FY18E on the back of higher operating profit and 9.3% yoy decline in depreciation post Ind-AS implementation. We expect EBIT margin of 23.8%/21.7%/23.3% in FY18E/FY19E/FY20E against 15.5% in FY17. EBIT margin is expected to improve by 785bps during FY17-FY20E.

We expect 867bps yoy improvement in adj PAT margin in FY18E. In FY19E, we are factoring in 46bps yoy drop in the adjusted PAT margin. But, we expect improvement of 218bps yoy thereafter in FY20E.

**Exhibit 22: Margins to improve going forward**



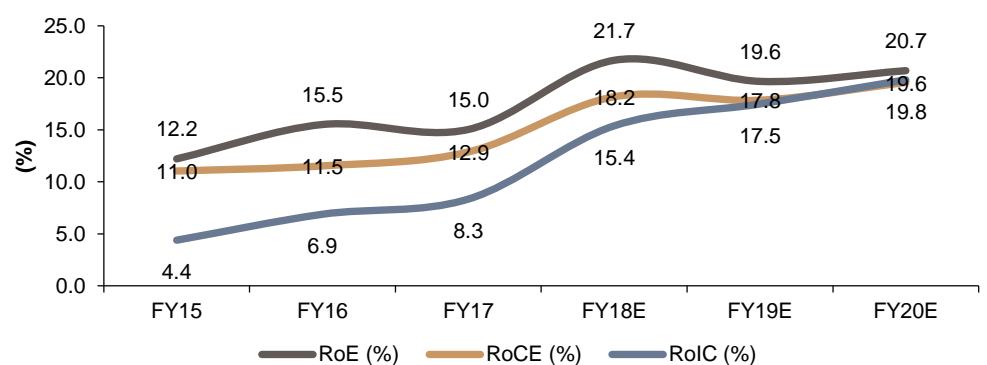
Source: Company, Emkay Research

### Return ratios to improve over FY17

The company's RoE is expected to improve to 21.7% in FY18E from 15% in FY17, as we expect improvement in EBIT margin whereas a 25% yoy decline in the interest cost is expected to lead to better profit. RoE is expected to be at 19.6%/20.7% in FY19E/FY20E.

RoCE is expected to improve to 18.2% in FY18E from 12.9% in FY17 on the back of an improvement in margins. Going forward, with EBIT margin likely to come under pressure, we expect RoCE in FY19E to be at 17.8%. However, we expect improvement of 171bps yoy thereafter in FY20E.

**Exhibit 23: Expect improvement in return ratios**



Source: Company, Emkay Research

**Exhibit 24: Du-pont analysis**

Particulars	FY15	FY16	FY17	FY18E	FY19E	FY20E
PAT/PBT	0.67	0.92	0.89	0.90	0.90	0.91
PBT/EBIT	0.59	0.64	0.72	0.86	0.92	0.96
EBIT/Sales	0.15	0.13	0.15	0.24	0.22	0.23
Sales/Asset	0.75	0.87	0.83	0.76	0.82	0.84
Asset/Equity	2.80	2.28	1.82	1.54	1.33	1.22
RoE (%)	12.2%	15.5%	15.0%	21.7%	19.6%	20.7%

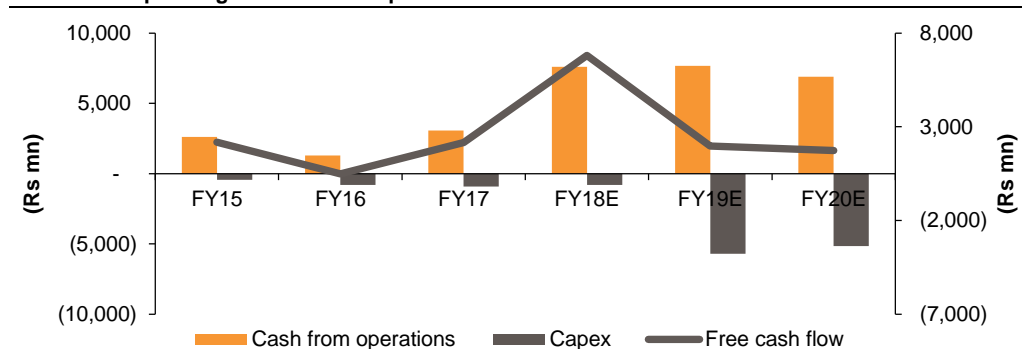
Source: Company, Emkay Research

### Increase in cash from operations and free cash flow

Star has consistently generated strong operating and free cash flows post the large expansion in end-FY13. Going forward, we expect the company to generate operating cash flow of Rs22.2bn during FY17-FY20E, which would help the company to meet its capex requirement from internal accruals without leveraging the balance sheet.

Star is planning a grinding unit in Siliguri, West Bengal, which is under final stages of consideration and we expect it to ramp up its clinker production capacity too (utilization rate of clinker is expected to be at 92% in FY20E).

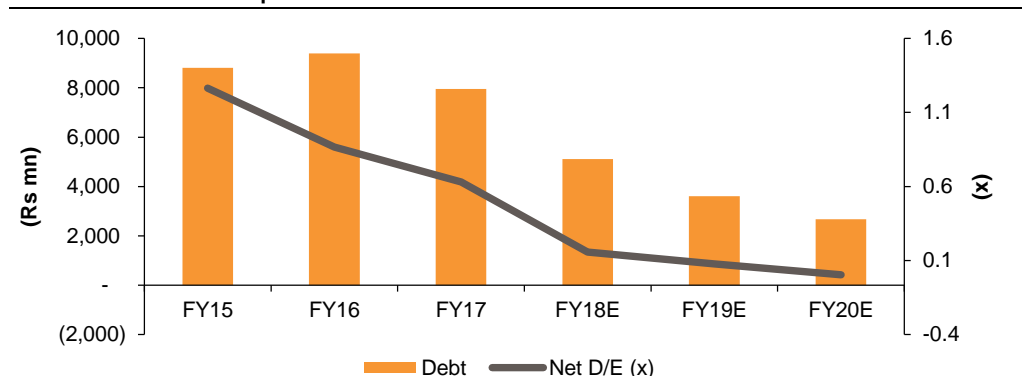
We expect the company to generate free cash flow of Rs10.5bn over FY17-FY20E despite our capex assumption of Rs11.7bn.

**Exhibit 25: Operating cash flow to improve**

Source: Company, Emkay Research

### Improvement in net D/E

Debt declined to Rs7.95bn in FY17 as against Rs9.4bn in FY16, leading to improvement in Net D/E from 1.3x in FY16 to 0.9x in FY17. We expect the company's debt to decline to Rs2.7bn in FY20E from Rs7.95bn in FY17 despite our estimates of fresh capex for new capacities, as cash flow generation is expected to remain strong. We expect it to become a zero net debt company in FY20E as against net D/E of 0.6x in FY17.

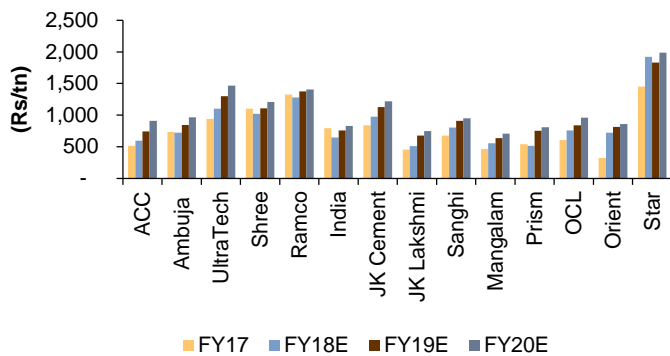
**Exhibit 26: Net D/E to improve**

Source: Company, Emkay Research

## Valuation and peer comparison – warrants premium due to industry leading EBITDA/tonne

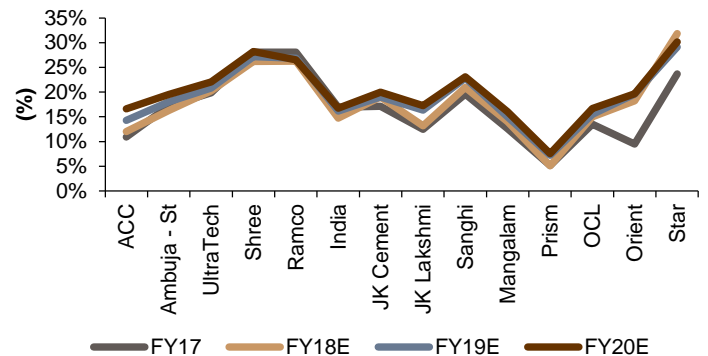
Star has consistently delivered more than 2x EBITDA/tn compared to the average of other companies in our coverage universe owing to its presence in a lucrative market and fiscal incentives. Despite freight subsidies getting expired in Jan'18, we expect it to continue to deliver ~2x EBITDA/tn vis-à-vis the average of other companies in our coverage. Star's EBITDA margin is expected to remain the highest among the companies in our coverage universe over FY18-20E despite our expectation of pressure on margins in FY19E. RoE and net D/E of the company are also among the best in our coverage universe. Considering these metrics, we believe that the stock deserves a re-rating.

**Exhibit 27: Highest EBITDA/tn among our coverage companies**



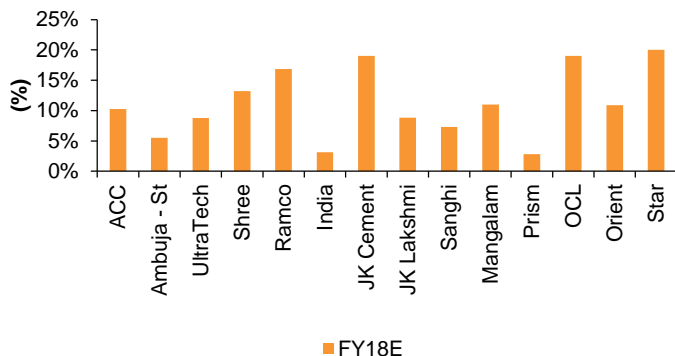
Source: Companies, Emkay Research

**Exhibit 28: OPM too better than most companies**



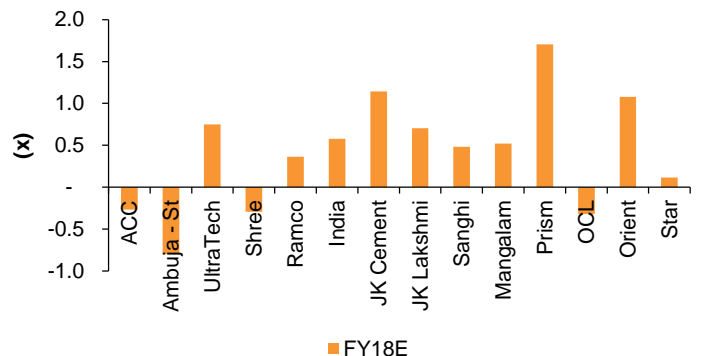
Source: Companies, Emkay Research

**Exhibit 29: RoE among the best in our coverage companies**



Source: Companies, Emkay Research

**Exhibit 30: Net D/E better than most mid-cap companies**



Source: Companies, Emkay Research

The stock trades at 17.6x/16x/12.6x FY18E/FY19E/FY20E EPS and 10.5x/9.1x/6.9x FY18E/FY19E/FY20E EV/EBITDA (ex-CWIP). It trades at US\$223/US\$196/US\$173 FY18E/FY19E/FY20E EV/tonne. We expect earnings to grow at a CAGR of 34% during FY17-FY20E. We value Star at 10x FY20E EV/EBITDA and arrive at a TP of Rs170, representing an upside of 37% from CMP. We initiate coverage on the stock with a BUY rating. At our TP, the stock will trade at 22.4x/22.3x/17.5x FY18E/FY19E/FY20E EPS and 14.4x/12.8x/10x FY18E/FY19E/FY20E EV/EBITDA.

**Exhibit 31: SOTP analysis**

<b>Target price calculation (Rs mn)</b>		<b>FY20E</b>
Cement EBITDA		6,128
Target Multiple (x)		10.0
CWIP		10,000
Total EV+ CWIP		71,281
Net Debt		49
Target M Cap		71,233
<b>Target Price (Rs)</b>		<b>170</b>
CMP (Rs)		124
Up/(downside) %		37

Source: Company, Emkay Research

**Exhibit 32: Peer Comparison**

Company	P/E (x)		EV/EBITDA (x)		RoE (%)		RoCE (%)	
	FY19E	FY20E	FY19E	FY20E	FY19E	FY20E	FY19E	FY20E
<b>Star Cement</b>	<b>16.0</b>	<b>12.6</b>	<b>10.2<sup>^</sup></b>	<b>8.5<sup>^</sup></b>	<b>19.6</b>	<b>20.7</b>	<b>17.8</b>	<b>19.6</b>
ACC*	26.8	20.0	14.7	11.3	12.4	15.3	16.5	20.1
Ambuja – Standalone*	39.4	32.4	23.4	19.0	6.7	7.9	9.5	11.2
UltraTech	41.6	29.6	18.5	14.6	10.7	13.5	11.4	14.4
Shree	39.6	29.2	16.8	13.0	16.0	18.5	22.4	25.7
Ramco	22.3	19.0	14.4	12.4	17.3	17.4	17.3	18.8
India	15.1	10.7	7.2	6.2	5.9	8.1	8.5	10.4
JK Cement	14.5	11.5	8.7	7.1	23.2	24.0	11.1	12.7
JK Lakshmi Cement	16.4	12.2	8.8	7.0	16.5	18.6	14.7	17.7
Orient Cement	24.6	16.9	9.7	7.9	11.4	14.9	8.2	10.2
OCL India	11.0	8.7	11.6	8.5	21.7	22.4	8.1	8.9
Mangalam Cement	9.9	7.5	6.0	4.5	16.6	18.6	16.1	18.8
Sanghi Industries	19.4	15.4	10.0	8.9	10.5	11.8	10.3	10.8

Source: Companies, Emkay Research \* December- ending companies; <sup>^</sup>ex-CWIP it trades at 9.1x/6.9x FY19E/FY20E EV/EBITDA

## Key Risks

### Inability to pass on input cost hikes may put pressure on margins

Star's inability to pass on higher input costs may put pressure on its margins. Freight subsidy, which used to boost operating profit by Rs300-350/tn, got over in Jan'18. We expect EBITDA/tn to decline by Rs92/tn yoy in FY19E, as we foresee some pressure due to the steep increase in freight cost. However, if price hikes are not forthcoming, then there could be more pressure on the company's margins.

### Pressure on cement prices if volume growth does not revive

There could be pressure on cement prices, if the demand growth is not as per our expectations, as it may put continued pressure on the utilization rate of cement manufacturers. The company's earnings are highly sensitive to change in cement prices. Hence, the profit could be adversely impacted if cement prices drop.

### Continued delay in receipt of subsidies

There have been delays in the disbursement of incentives from Gol in the last few years. Though the company has received Rs2.2bn of capital subsidies in YTD FY18, other incentives are still getting accumulated as accounts receivables in the balance sheet. We expect disbursements of freight, excise and VAT incentives to start from FY19E. Further delay in the receipt of these subsidies may create negative sentiments for the stock.

## Key Assumptions

### Exhibit 33: Operating costs and profit trend

Operating matrix (Rs/tn)	FY15	FY16	FY17	FY18E	FY19E	FY20E
Realization	6,030	6,217	6,135	6,043	6,285	6,599
Net Raw material	974	1,252	1,471	1,251	1,313	1,379
Employee cost	387	393	421	425	418	426
Energy cost	730	781	680	762	800	840
Freight cost	1,029	1,073	958	1,033	1,258	1,283
Other expense	1,064	1,270	1,153	651	666	682
Total operating cost	4,184	4,769	4,684	4,121	4,455	4,610
EBITDA	1,846	1,448	1,451	1,922	1,830	1,989

Source: Company, Emkay Research

### Exhibit 34: Common-size analysis

Common-size analysis	FY15	FY16	FY17	FY18E	FY19E	FY20E
Revenue	100.0	100.0	100.0	100.0	100.0	100.0
Net Raw material	16.0	20.1	24.0	20.7	20.9	20.9
Employee cost	6.4	6.3	6.9	7.0	6.6	6.5
Energy cost	12.0	12.6	11.1	12.6	12.7	12.7
Freight cost	17.0	17.3	15.6	17.1	20.0	19.4
Other expense	18.2	20.5	18.8	10.8	10.6	10.3
Total operating cost	69.6	76.7	76.3	68.2	70.9	69.9
EBITDA	30.4	23.3	23.7	31.8	29.1	30.1
Depreciation	15.6	10.0	8.2	8.0	7.4	6.8
EBIT	14.8	13.3	15.5	23.8	21.7	23.3
Interest	6.1	4.9	4.5	3.7	2.2	1.4
Other income	0.1	0.1	0.1	0.3	0.4	0.4
PBT	8.7	8.5	11.1	20.5	20.0	22.3
Tax	0.3	0.3	0.8	3.1	3.0	3.3
Adj. profit	8.4	8.2	10.3	17.4	17.0	19.0

Source: Company, Emkay Research

## Snapshot from Plant-visit

**Exhibit 35: Limestone mines**



Source: Company, Emkay Research

**Exhibit 36: Stacker Reclaimer**



Source: Company, Emkay Research

**Exhibit 37: Kiln and pre-heater**



Source: Company, Emkay Research

**Exhibit 38: Process monitoring**



Source: Company, Emkay Research

**Exhibit 39: Lab Testing**



Source: Company, Emkay Research

**Exhibit 40: Packaging Unit**



Source: Company, Emkay Research



## Company background

Star Cement Ltd was incorporated in Nov'01 under the name of Cements Manufacturing Company Ltd, which was later changed to Cement Manufacturing Company Ltd in Nov'04. The name of the company was further changed to Star Cement Ltd in Jun'16. Star is promoted by Mr. Sajjan Bhajanka, Mr. Hari Prasad Agarwal, Mr. Sanjay Agarwal, Mr. Prem Kumar Bhajanka and Mr. Rajendra Chamaria, who also have interests in Plywood, Laminates, Ferro Alloys, among others.

Star commenced operations in 2005 and is the one of the largest cement manufacturers in the North East region today. It has also expanded its foothold in other states in the East India region in the last few years.

The company along with its subsidiaries, Meghalaya Power Ltd (MPL), Megha Technical & Engineers Pvt. Ltd. (MTEPL) and Star Cement Meghalaya Ltd. (SCML) and hired Grinding units, has a combined manufacturing capacity of 2.6mt of clinker, 4.4mt of cement and 51 MW power.

SCL holds 100% equity shares in MTEPL, 87.49% in SCML (with the balance being held by MTEPL) and 51% in MPL. The holding structure of the group has recently undergone some changes, with the erstwhile parent company, Star Ferro & Cement Ltd (SFCL), merging with SCL under a reverse merger scheme (appointed date at April 01, 2016). Post-merger, Star's equity shares are listed on NSE and BSE (from June 2017).

### Exhibit 41: Key management personnel

Name	Position	Qualification and Experience
<b>Mr. Sajjan Bhajanka</b>	Chairman	Mr. Sajjan Bhajanka is a Commerce Graduate from Dibrugarh University, Assam. He has business and industrial experience of more than 25 years in the fields of Plywood, Ferro Silicon, Granite, export and import. He is the Managing Director of Century Plyboards (I) Limited, the largest producer of plywood, laminates and block-boards in India. Mr. Bhajanka is also the Chairman of Shyam Century Ferrous Ltd., one of the leading manufacturers of Ferro Silicon in India. Mr. Bhajanka is the President of the Federation of Indian Plywood and Panel Industry and All India Veneer Manufacturers Association. He is also a member of Governing Boards like Indian Plywood Industries Research and Training Institute, Bangalore and Bharat Chamber of Commerce. He is a promoter Director and also the Chairman of Cement Manufacturing Company Ltd.
<b>Mr. Rajendra Chamaria</b>	Vice Chairman & MD	Mr. Rajendra Chamaria is a Commerce graduate. He is a partner in Nefa Udyog, Banderdewa, and Arunachal Pradesh. Nefa Udyog Ltd., is engaged in the business of timber in a large scale in the state of Arunachal Pradesh. Mr. Chamaria is also a Director in M/s Donyolo Udyog Ltd. The company deals in concrete business i.e. manufacturing different types of concrete sleepers. He is also a promoter Director of Cement Manufacturing Company Ltd.
<b>Mr. Sanjay Kumar Gupta</b>	Chief Executive Officer	Mr. Sanjay Kumar Gupta has been the Chief Executive Officer of Star Cement since September 20, 2014. Mr. Gupta served as the Chief Financial Officer of Star Ferro and Cement Limited until September 20, 2014. Mr. Gupta served as the Chief Financial Officer of Century Plyboards (India) Limited until March 31, 2012. Under his leadership, the company has seen growth of 10 times in terms of production and market expansion from North East to West Bengal, Bihar and now Jharkhand. Prior to joining CMCL he has worked with Vinay Cements and Arihant Credit Capital. He is a Fellow Chartered Accountant and ICWA.
<b>Mr. Sanjay Agarwal</b>	Director Marketing	Mr. Agarwal is a commerce graduate having 29 years of experience in various fields. He is the Managing Director & a Promoter Director of Century Plyboards (India) Ltd and Star Cement Limited. He is the driving force behind the successful making of 'Star Cement' Brand. He is looking after Sales, Marketing, IT & HR activities of the company. He also serves as a Director of Century Coats Ltd., Century Plantations Ltd., Century Equities Pvt. Ltd., Sumangal International Pvt. Ltd. and Pacific Plywoods Pvt. Ltd. He has been a Director of Century Infotech Limited since August 27, 2015.
<b>Mr. Manoj Agarwal</b>	Chief Financial Officer	Mr. Manoj Agarwal has been the Chief Financial Officer of Star Cement Limited since November 13, 2017. Mr. Agarwal served as Compliance Officer and Company Secretary of Star Cement Limited since July 27, 2009 until August 2, 2017. Mr. Agarwal vested with the responsibility of addressing the Investors Grievance in coordination with the Registrars & Share Transfer Agents. He is with Star Cement since July 27, 2009. He has expertise in Accounts, Legal and Compliance. He holds CA, CS & LLB.

Source: Company

**Key Financials (Consolidated)****Income Statement**

Y/E Mar (Rs mn)	FY16	FY17	FY18E	FY19E	FY20E
<b>Revenue</b>	<b>17,150</b>	<b>17,280</b>	<b>16,028</b>	<b>17,963</b>	<b>20,329</b>
<b>Expenditure</b>	<b>13,156</b>	<b>13,192</b>	<b>10,931</b>	<b>12,732</b>	<b>14,200</b>
<b>EBITDA</b>	<b>3,994</b>	<b>4,088</b>	<b>5,097</b>	<b>5,231</b>	<b>6,128</b>
Depreciation	1,715	1,412	1,281	1,331	1,385
<b>EBIT</b>	<b>2,279</b>	<b>2,676</b>	<b>3,816</b>	<b>3,900</b>	<b>4,743</b>
Other Income	13	22	50	77	75
Interest expenses	834	780	587	392	282
<b>PBT</b>	<b>1,458</b>	<b>1,918</b>	<b>3,279</b>	<b>3,586</b>	<b>4,536</b>
Tax	60	143	244	267	338
Extraordinary Items	5	0	0	0	0
Minority Int./Income from Assoc.	0	0	0	0	0
<b>Reported Net Income</b>	<b>1,340</b>	<b>1,716</b>	<b>2,955</b>	<b>3,239</b>	<b>4,118</b>
<b>Adjusted PAT</b>	<b>1,346</b>	<b>1,716</b>	<b>2,955</b>	<b>3,239</b>	<b>4,118</b>

**Balance Sheet**

Y/E Mar (Rs mn)	FY16	FY17	FY18E	FY19E	FY20E
Equity share capital	419	419	419	419	419
Reserves & surplus	10,134	11,861	14,570	17,562	21,434
<b>Net worth</b>	<b>10,553</b>	<b>12,280</b>	<b>14,989</b>	<b>17,981</b>	<b>21,853</b>
<b>Minority Interest</b>	<b>530</b>	<b>589</b>	<b>669</b>	<b>749</b>	<b>829</b>
<b>Loan Funds</b>	<b>9,398</b>	<b>7,950</b>	<b>5,105</b>	<b>3,605</b>	<b>2,676</b>
Net deferred tax liability	117	163	263	363	463
<b>Total Liabilities</b>	<b>20,599</b>	<b>20,982</b>	<b>21,027</b>	<b>22,699</b>	<b>25,822</b>
<b>Net block</b>	<b>9,186</b>	<b>8,627</b>	<b>8,045</b>	<b>7,414</b>	<b>6,829</b>
<b>Investment</b>	<b>15</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>17</b>
<b>Current Assets</b>	<b>14,970</b>	<b>15,551</b>	<b>15,727</b>	<b>13,263</b>	<b>12,693</b>
Cash & bank balance	244	206	2,743	2,214	2,628
Other Current Assets	0	0	0	0	0
<b>Current liabilities &amp; Provision</b>	<b>4,062</b>	<b>3,761</b>	<b>3,412</b>	<b>3,644</b>	<b>3,717</b>
<b>Net current assets</b>	<b>10,908</b>	<b>11,790</b>	<b>12,315</b>	<b>9,619</b>	<b>8,975</b>
Misc. exp	0	0	0	0	0
<b>Total Assets</b>	<b>20,599</b>	<b>20,982</b>	<b>21,027</b>	<b>22,699</b>	<b>25,822</b>

**Cash Flow**

Y/E Mar (Rs mn)	FY16	FY17	FY18E	FY19E	FY20E
<b>PBT (Ex-Other income) (NI+Dep)</b>	<b>1,445</b>	<b>1,918</b>	<b>3,279</b>	<b>3,586</b>	<b>4,536</b>
Other Non-Cash items	821	790	587	392	282
Chg in working cap	(2,384)	(921)	2,011	2,168	1,058
<b>Operating Cashflow</b>	<b>1,297</b>	<b>3,080</b>	<b>6,965</b>	<b>7,232</b>	<b>6,948</b>
Capital expenditure	(808)	(912)	(800)	(5,700)	(5,151)
<b>Free Cash Flow</b>	<b>489</b>	<b>2,168</b>	<b>6,165</b>	<b>1,532</b>	<b>1,797</b>
Investments	(3)	(1)	0	0	0
Other Investing Cash Flow	0	0	0	0	0
<b>Investing Cashflow</b>	<b>(796)</b>	<b>(891)</b>	<b>(750)</b>	<b>(5,623)</b>	<b>(5,076)</b>
Equity Capital Raised	0	0	0	0	0
Loans Taken / (Repaid)	694	(1,448)	(2,845)	(1,500)	(929)
Dividend paid (incl tax)	(222)	0	(247)	(247)	(247)
Other Financing Cash Flow	(99)	0	0	0	0
<b>Financing Cashflow</b>	<b>(461)</b>	<b>(2,228)</b>	<b>(3,678)</b>	<b>(2,138)</b>	<b>(1,458)</b>
<b>Net chg in cash</b>	<b>40</b>	<b>(39)</b>	<b>2,537</b>	<b>(529)</b>	<b>414</b>
Opening cash position	204	245	206	2,743	2,214
<b>Closing cash position</b>	<b>244</b>	<b>206</b>	<b>2,743</b>	<b>2,214</b>	<b>2,628</b>

Source: Company, Emkay Research

**Key Ratios**

<b>Profitability (%)</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18E</b>	<b>FY19E</b>	<b>FY20E</b>
EBITDA Margin	23.3	23.7	31.8	29.1	30.1
EBIT Margin	13.3	15.5	23.8	21.7	23.3
Effective Tax Rate	4.1	7.4	7.4	7.4	7.4
Net Margin	8.2	10.3	18.9	18.5	20.7
ROCE	11.6	13.0	18.4	18.2	19.9
ROE	15.5	15.0	21.7	19.6	20.7
RoIC	11.9	13.4	20.2	24.0	33.9

<b>Per Share Data (Rs)</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18E</b>	<b>FY19E</b>	<b>FY20E</b>
EPS	3.2	4.1	7.1	7.7	9.8
CEPS	7.3	7.5	10.1	10.9	13.1
BVPS	25.2	29.3	35.8	42.9	52.1
DPS	0.5	0.0	0.5	0.5	0.5

<b>Valuations (x)</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18E</b>	<b>FY19E</b>	<b>FY20E</b>
PER	38.6	30.3	17.6	16.0	12.6
P/CEPS	16.7	16.3	12.1	11.2	9.3
P/BV	4.9	4.2	3.5	2.9	2.4
EV / Sales	3.6	3.5	3.4	3.0	2.6
EV / EBITDA	15.3	14.6	10.7	10.2	8.5
Dividend Yield (%)	0.4	0.0	0.4	0.4	0.4

<b>Gearing Ratio (x)</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18E</b>	<b>FY19E</b>	<b>FY20E</b>
Net Debt/ Equity	0.9	0.6	0.2	0.1	0.0
Net Debt/EBIDTA	2.3	1.9	0.5	0.3	0.0
Working Cap Cycle (days)	226.9	244.7	218.0	150.5	114.0

<b>Growth (%)</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18E</b>	<b>FY19E</b>	<b>FY20E</b>
Revenue	19.8	0.7	(6.9)	12.1	13.2
EBITDA	(8.2)	2.4	24.7	2.6	17.1
EBIT	7.8	17.4	42.6	2.2	21.6
PAT	60.6	28.0	72.2	9.6	27.2

<b>Quarterly (Rs mn)</b>	<b>Q2FY17</b>	<b>Q3FY17</b>	<b>Q4FY17</b>	<b>Q1FY18</b>	<b>Q2FY18</b>
Revenue	3,120	3,588	4,642	4,287	2,810
EBITDA	590	881	1,700	1,586	770
<b>EBITDA Margin (%)</b>	<b>18.9</b>	<b>24.5</b>	<b>36.6</b>	<b>37.0</b>	<b>27.4</b>
PAT	17	321	1,036	1,075	258
<b>EPS (Rs)</b>	<b>-</b>	<b>0.8</b>	<b>2.5</b>	<b>2.6</b>	<b>0.6</b>

Source: Company, Emkay Research

<b>Shareholding Pattern (%)</b>	<b>Jun-17</b>	<b>Sep-17</b>	<b>Dec-17</b>
Promoters	74.9	74.6	73.3
FIs	0.1	0.4	2.0
DIs	1.2	1.6	2.7
Public and Others	23.8	23.4	22.1

Source: Capitaline

## Emkay Rating Distribution

BUY	Expected total return (%) (Stock price appreciation and dividend yield) of over 25% within the next 12-18 months.
ACCUMULATE	Expected total return (%) (Stock price appreciation and dividend yield) of over 10% within the next 12-18 months.
HOLD	Expected total return (%) (Stock price appreciation and dividend yield) of upto 10% within the next 12-18 months.
REDUCE	Expected total return (%) (Stock price depreciation) of upto (-) 10% within the next 12-18 months.
SELL	The stock is believed to underperform the broad market indices or its related universe within the next 12-18 months.

Completed Date:

Dissemination Date:

Sources for all charts and tables are Emkay Research unless otherwise specified.

### GENERAL DISCLOSURE/DISCLAIMER BY EMKAY GLOBAL FINANCIAL SERVICES LIMITED (EGFSL):

Emkay Global Financial Services Limited (CIN-L67120MH1995PLC084899) and its affiliates are a full-service, brokerage, investment banking, investment management and financing group. Emkay Global Financial Services Limited (EGFSL) along with its affiliates are participants in virtually all securities trading markets in India. EGFSL was established in 1995 and is one of India's leading brokerage and distribution house. EGFSL is a corporate trading member of Bombay Stock Exchange Limited (BSE), National Stock Exchange of India Limited (NSE), MCX Stock Exchange Limited (MCX-SX). EGFSL along with its subsidiaries offers the most comprehensive avenues for investments and is engaged in the businesses including stock broking (Institutional and retail), merchant banking, commodity broking, depository participant, portfolio management, insurance broking and services rendered in connection with distribution of primary market issues and financial products like mutual funds, fixed deposits. Details of associates are available on our website i.e. [www.emkayglobal.com](http://www.emkayglobal.com)

EGFSL is registered as Research Analyst with SEBI bearing registration Number INH000000354 as per SEBI (Research Analysts) Regulations, 2014. EGFSL hereby declares that it has not defaulted with any stock exchange nor its activities were suspended by any stock exchange with whom it is registered in last five years, except that NSE had disabled EGFSL from trading on October 05, October 08 and October 09, 2012 for a manifest error resulting into a bonafide erroneous trade on October 05, 2012. However, SEBI and Stock Exchanges have conducted the routine inspection and based on their observations have issued advice letters or levied minor penalty on EGFSL for certain operational deviations in ordinary/routine course of business. EGFSL has not been debarred from doing business by any Stock Exchange / SEBI or any other authorities; nor has its certificate of registration been cancelled by SEBI at any point of time.

EGFSL offers research services to clients as well as prospects. The analyst for this report certifies that all of the views expressed in this report accurately reflect his or her personal views about the subject company or companies and its or their securities, and no part of his or her compensation was, is or will be, directly or indirectly related to specific recommendations or views expressed in this report.

Other disclosures by Emkay Global Financial Services Limited (Research Entity) and its Research Analyst under SEBI (Research Analyst) Regulations, 2014 with reference to the subject company(s) covered in this report

EGFSL and/or its affiliates may seek investment banking or other business from the company or companies that are the subject of this material. Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients that reflect opinions that are contrary to the opinions expressed herein, and our proprietary trading and investing businesses may make investment decisions that may be inconsistent with the recommendations expressed herein. In reviewing these materials, you should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest including but not limited to those stated herein. Additionally, other important information regarding our relationships with the company or companies that are the subject of this material is provided herein. 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 EGFSL or its group companies to any registration or licensing requirement within such jurisdiction. Specifically, this document does not constitute an offer to or solicitation to any U.S. person for the purchase or sale of any financial instrument or as an official confirmation of any transaction to any U.S. person. Unless otherwise stated, this message should not be construed as official confirmation of any transaction. No part of this document may be used by private customers in United Kingdom. All material presented in this report, unless specifically indicated otherwise, is under copyright to Emkay. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of EGFSL. All trademarks, service marks and logos used in this report are trademarks or registered trademarks of EGFSL or its Group Companies. The information contained herein is not intended for publication or distribution or circulation in any manner whatsoever and any unauthorized reading, dissemination, distribution or copying of this communication is prohibited unless otherwise expressly authorized. Please ensure that you have read "Risk Disclosure Document for Capital Market and Derivatives Segments" as prescribed by Securities and Exchange Board of India before investing in Indian Securities Market. In so far as this report includes current or historic information, it is believed to be reliable, although its accuracy and completeness cannot be guaranteed.

- This publication has not been reviewed or authorized by any regulatory authority. There is no planned schedule or frequency for updating research publication relating to any issuer.

- Please contact the primary analyst for valuation methodologies and assumptions associated with the covered companies or price targets

**Disclaimer for U.S. persons only:** This research report is a product of Emkay Global Financial Services Limited (Emkay), 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 Financial Institutions Regulatory Authority (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 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.

**GENERAL DISCLOSURE/DISCLAIMER BY DBS BANK LTD AS DISTRIBUTOR OF THE RESEARCH REPORT**

This report is solely intended for the clients of DBS Bank Ltd, its respective connected and associated corporations and affiliates only and no part of this document may be (i) copied, photocopied or duplicated in any form or by any means or (ii) redistributed without the prior written consent of DBS Bank Ltd.

The research set out in this report is based on information obtained from sources believed to be reliable, but we (which collectively refers to DBS Bank Ltd, its respective connected and associated corporations, affiliates and their respective directors, officers, employees and agents (collectively, the "DBS Group") have not conducted due diligence on any of the companies, verified any information or sources or taken into account any other factors which we may consider to be relevant or appropriate in preparing the research. Accordingly, we do not make any representation or warranty as to the accuracy, completeness or correctness of the research set out in this report. Opinions expressed are subject to change without notice. This research is prepared for general circulation. Any recommendation contained in this document does not have regard to the specific investment objectives, financial situation and the particular needs of any specific addressee. This document is for the information of addressees only and is not to be taken in substitution for the exercise of judgement by addressees, who should obtain separate independent legal or financial advice. The DBS Group accepts no liability whatsoever for any direct, indirect and/or consequential loss (including any claims for loss of profit) arising from any use of and/or reliance upon this document and/or further communication given in relation to this document. This document is not to be construed as an offer or a solicitation of an offer to buy or sell any securities. The DBS Group, along with its affiliates and/or persons associated with any of them may from time to time have interests in the securities mentioned in this document. The DBS Group, may have positions in, and may effect transactions in securities mentioned herein and may also perform or seek to perform broking, investment banking and other banking services for these companies. Any valuations, opinions, estimates, forecasts, ratings or risk assessments herein constitutes a judgment as of the date of this report, and there can be no assurance that future results or events will be consistent with any such valuations, opinions, estimates, forecasts, ratings or risk assessments. The information in this document is subject to change without notice, its accuracy is not guaranteed, it may be incomplete or condensed, it may not contain all material information concerning the company (or companies) referred to in this report and the DBS Group is under no obligation to update the information in this report. This publication has not been reviewed or authorized by any regulatory authority in Singapore, Hong Kong or elsewhere. There is no planned schedule or frequency for updating research publication relating to any issuer.

The valuations, opinions, estimates, forecasts, ratings or risk assessments described in this report were based upon a number of estimates and assumptions and are inherently subject to significant uncertainties and contingencies. It can be expected that one or more of the estimates on which the valuations, opinions, estimates, forecasts, ratings or risk assessments were based will not materialize or will vary significantly from actual results. Therefore, the inclusion of the valuations, opinions, estimates, forecasts, ratings or risk assessments described herein IS NOT TO BE RELIED UPON as a representation and/or warranty by the DBS Group (and/or any persons associated with the aforesaid entities), that: (a) such valuations, opinions, estimates, forecasts, ratings or risk assessments or their underlying assumptions will be achieved, and (b) there is any assurance that future results or events will be consistent with any such valuations, opinions, estimates, forecasts, ratings or risk assessments stated therein. Please contact the primary analyst for valuation methodologies and assumptions associated with the covered companies or price targets. Any assumptions made in this report that refers to commodities, are for the purposes of making forecasts for the company (or companies) mentioned herein. They are not to be construed as recommendations to trade in the physical commodity or in the futures contract relating to the commodity referred to in this report.

DBSVUSA, a US-registered broker-dealer, does not have its own investment banking or research department, has not participated in any public offering of securities as a manager or co-manager or in any other investment banking transaction in the past twelve months and does not engage in market-making.

**ANALYST CERTIFICATION BY EMKAY GLOBAL FINANCIAL SERVICES LIMITED (EGFSL)**

The research analyst(s) primarily responsible for the content of this research report, in part or in whole, certifies that the views about the companies and their securities expressed in this report accurately reflect his/her personal views. The analyst(s) also certifies that no part of his/her compensation was, is, or will be, directly or indirectly, related to specific recommendations or views expressed in the report. The research analyst (s) primarily responsible of the content of this research report, in part or in whole, certifies that he or his associate<sup>1</sup> does not serve as an officer, director or employee of the issuer or the new listing applicant (which includes in the case of a real estate investment trust, an officer of the management company of the real estate investment trust; and in the case of any other entity, an officer or its equivalent counterparty of the entity who is responsible for the management of the issuer or the new listing applicant). The research analyst(s) primarily responsible for the content of this research report or his associate does not have financial interests<sup>2</sup> in relation to an issuer or a new listing applicant that the analyst reviews. EGFSL has procedures in place to eliminate, avoid and manage any potential conflicts of interests that may arise in connection with the production of research reports. The research analyst(s) responsible for this report operates as part of a separate and independent team to the investment banking function of the EGFSL and procedures are in place to ensure that confidential information held by either the research or investment banking function is handled appropriately. There is no direct link of EGFSL compensation to any specific investment banking function of the EGFSL.

<sup>1</sup> An associate is defined as (i) the spouse, or any minor child (natural or adopted) or minor step-child, of the analyst; (ii) the trustee of a trust of which the analyst, his spouse, minor child (natural or adopted) or minor step-child, is a beneficiary or discretionary object; or (iii) another person accustomed or obliged to act in accordance with the directions or instructions of the analyst.

<sup>2</sup> Financial interest is defined as interest that are commonly known financial interest, such as investment in the securities in respect of an issuer or a new listing applicant, or financial accommodation arrangement between the issuer or the new listing applicant and the firm or analysis. This term does not include commercial lending conducted at the arm's length, or investments in any collective investment scheme other than an issuer or new listing applicant notwithstanding the fact that the scheme has investments in securities in respect of an issuer or a new listing applicant.

**COMPANY-SPECIFIC / REGULATORY DISCLOSURES BY EMKAY GLOBAL FINANCIAL SERVICES LIMITED (EGFSL):**

Disclosures by Emkay Global Financial Services Limited (Research Entity) and its Research Analyst under SEBI (Research Analyst) Regulations, 2014 with reference to the subject company(s) covered in this report:-

1. EGFSL, its subsidiaries and/or other affiliates do not have a proprietary position in the securities recommended in this report as of February 5, 2018
2. EGFSL, and/or Research Analyst does not market make in equity securities of the issuer(s) or company(ies) mentioned in this Research Report  
**Disclosure of previous investment recommendation produced:**
3. EGFSL may have published other investment recommendations in respect of the same securities / instruments recommended in this research report during the preceding 12 months. Please contact the primary analyst listed in the first page of this report to view previous investment recommendations published by EGFSL in the preceding 12 months.
4. EGFSL, its subsidiaries and/or other affiliates and Research Analyst or his/her relative's does not have any material conflict of interest in the securities recommended in this report as of February 5, 2018.
5. EGFSL, its subsidiaries and/or other affiliates and Research Analyst or his/her relative's does not have actual/beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the February 5, 2018
6. EGFSL, its subsidiaries and/or other affiliates and Research Analyst have not received any compensation in whatever form including compensation for investment banking or merchant banking or brokerage services or for products or services other than investment banking or merchant banking or brokerage services from securities recommended in this report (subject company) in the past 12 months.
7. EGFSL, its subsidiaries and/or other affiliates and/or and Research Analyst have not received any compensation or other benefits from securities recommended in this report (subject company) or third party in connection with the research report.
8. Securities recommended in this report (Subject Company) has not been client of EGFSL, its subsidiaries and/or other affiliates and/or and Research Analyst during twelve months preceding the February 5, 2018

**COMPANY-SPECIFIC / REGULATORY DISCLOSURES BY DBS BANK LTD AS DISTRIBUTOR OF THE RESEARCH REPORT**

1. DBS Bank Ltd., DBS HK, DBS Vickers Securities (Singapore) Pte Ltd ("DBSVS"), DBSV HK or their subsidiaries and/or other affiliates do not have a proprietary position in the securities recommended in this report as of 31 July 2017.
2. Neither DBS Bank Ltd, DBS HK nor DBSV HK market makes in equity securities of the issuer(s) or company(ies) mentioned in this Research Report.

**Compensation for investment banking services:**

3. DBSVUSA, does not have its own investment banking or research department, nor has it participated in any public offering of securities as a manager or co-manager or in any other investment banking transaction in the past twelve months. Any US persons wishing to obtain further information, including any clarification on disclosures in this disclaimer, or to effect a transaction in any security discussed in this document should contact DBSVUSA exclusively.

**Disclosure of previous investment recommendation produced:**

4. DBS Bank Ltd, DBS Vickers Securities (Singapore) Pte Ltd ("DBSVS"), their subsidiaries and/or other affiliates may have published other investment recommendations in respect of the same securities / instruments recommended in this research report during the preceding 12 months. Please contact the primary analyst listed in the first page of this report to view previous investment recommendations published by DBS Bank Ltd, DBS Vickers Securities (Singapore) Pte Ltd ("DBSVS"), their subsidiaries and/or other affiliates in the preceding 12 months.

**RESTRICTIONS ON DISTRIBUTION**

General	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.
Australia	This report is not for distribution into Australia.
Hong Kong	This report is not for distribution into Hong Kong.
Indonesia	This report is being distributed in Indonesia by PT DBS Vickers Sekuritas Indonesia.
Malaysia	This report is not for distribution into Malaysia.
Singapore	This report is distributed in Singapore by DBS Bank Ltd (Company Regn. No. 16800306E) or DBSVS (Company Regn. No. 1860024G) both of which are Exempt Financial Advisers as defined in the Financial Advisers Act and regulated by the Monetary Authority of Singapore. DBS Bank Ltd and/or DBSVS, may distribute reports produced by its respective foreign entities, affiliates or other foreign research houses pursuant to an agreement under Regulation 32C of the financial Advisers Regulations. Singapore recipients should contact DBS Bank Ltd at 6327 2288 for matters arising from, or in connection with the report.
Thailand	This report is being distributed in Thailand by DBS Vickers Securities (Thailand) Co Ltd.
United Kingdom	This report is disseminated in the United Kingdom by DBS Vickers Securities (UK) Ltd, ("DBSVUK"). DBSVUK is authorised and regulated by the Financial Conduct Authority in the United Kingdom. In respect of the United Kingdom, this report is solely intended for the clients of DBSVUK, its respective connected and associated corporations and affiliates only and no part of this document may be (i) copied, photocopied or duplicated in any form or by any means or (ii) redistributed without the prior written consent of DBSVUK. This communication is directed at persons having professional experience in matters relating to investments. Any investment activity following from this communication will only be engaged in with such persons. Persons who do not have professional experience in matters relating to investments should not rely on this communication.
Dubai International Financial Centre	This research report is being distributed by DBS Bank Ltd., (DIFC Branch) having its office at PO Box 506538, 3rd Floor, Building 3, East Wing, Gate Precinct, Dubai International Financial Centre (DIFC), Dubai, United Arab Emirates. DBS Bank Ltd., (DIFC Branch) is regulated by The Dubai Financial Services Authority. This research report is intended only for professional clients (as defined in the DFSA rulebook) and no other person may act upon it.
United Arab Emirates	This report is provided by DBS Bank Ltd (Company Regn. No. 196800306E) which is an Exempt Financial Adviser as defined in the Financial Advisers Act and regulated by the Monetary Authority of Singapore. This report is for information purposes only and should not be relied upon or acted on by the recipient or considered as a solicitation or inducement to buy or sell any financial product. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situation, or needs of individual clients. You should contact your relationship manager or investment adviser if you need advice on the merits of buying, selling or holding a particular investment. You should note that the information in this report may be out of date and it is not represented or warranted to be accurate, timely or complete. This report or any portion thereof may not be reprinted, sold or redistributed without our written consent.
United States	DBSVUSA did not participate in its preparation. The research analyst(s) named on this report are not registered as research analysts with FINRA and are not associated persons of DBSVUSA. The research analyst(s) are not subject to FINRA Rule 2241 restrictions on analyst compensation, communications with a subject company, public appearances and trading securities held by a research analyst. This report is being distributed in the United States by DBSVUSA, which accepts responsibility for its contents. This report may only be distributed to Major U.S. Institutional Investors (as defined in SEC Rule 15a-6) and to such other institutional investors and qualified persons as DBSVUSA may authorize. Any U.S. person receiving this report who wishes to effect transactions in any securities referred to herein should contact DBSVUSA directly and not its affiliate.
Other jurisdictions	In any other jurisdictions, except if otherwise restricted by laws or regulations, this report is intended only for qualified, professional, institutional or sophisticated investors as defined in the laws and regulations of such jurisdictions.

**Emkay Global Financial Services Ltd.**

CIN - L67120MH1995PLC084899

7th Floor, The Ruby, Senapati Bapat Marg, Dadar - West, Mumbai - 400028. India

Tel: +91 22 66121212 Fax: +91 22 66121299 Web: [www.emkayglobal.com](http://www.emkayglobal.com)

**SINGAPORE****DBS Bank Ltd**

Contact: Janice Chua  
12 Marina Boulevard, Marina Bay Financial Centre Tower 3  
Singapore 018982  
Tel. 65-6878 8888  
Fax: 65 65353 418  
e-mail: equityresearch@dbs.com  
Company Regn. No. 196800306E

---

**THAILAND****DBS Vickers Securities (Thailand) Co Ltd**

Contact: Chanpen Sirithanarattanakul  
989 Siam Piwat Tower Building,  
9<sup>th</sup>, 14<sup>th</sup>-15<sup>th</sup> Floor  
Rama 1 Road, Pathumwan,  
Nagkok Thailand 10330  
Tel. 66 2 857 7831  
Fax: 66 2 658 1269  
e-mail: research@th.dbs.com  
Company Regn. No 0105539127012  
Securities and Exchange Commission, Thailand

---

**INDONESIA****PT DBS Vickers Sekuritas (Indonesia)**

Contact: Maynard Priajaya Arif  
DBS Bank Tower  
Ciputra World 1, 32/F  
Jl. Prof. Dr. Satrio Kav. 3-5  
Jakarta 12940, Indonesia  
Tel. 62 21 3003 4900  
Fax: 62 21 3003 4943  
e-mail: research@id.dbsvickers.com

---





Sanjeev Kumar Singh, MBA

sanjeev.singh@emkayglobal.com

+91 22 66121255