9 APRIL 2018

SECTOR UPDATE
INDIA CEMENT

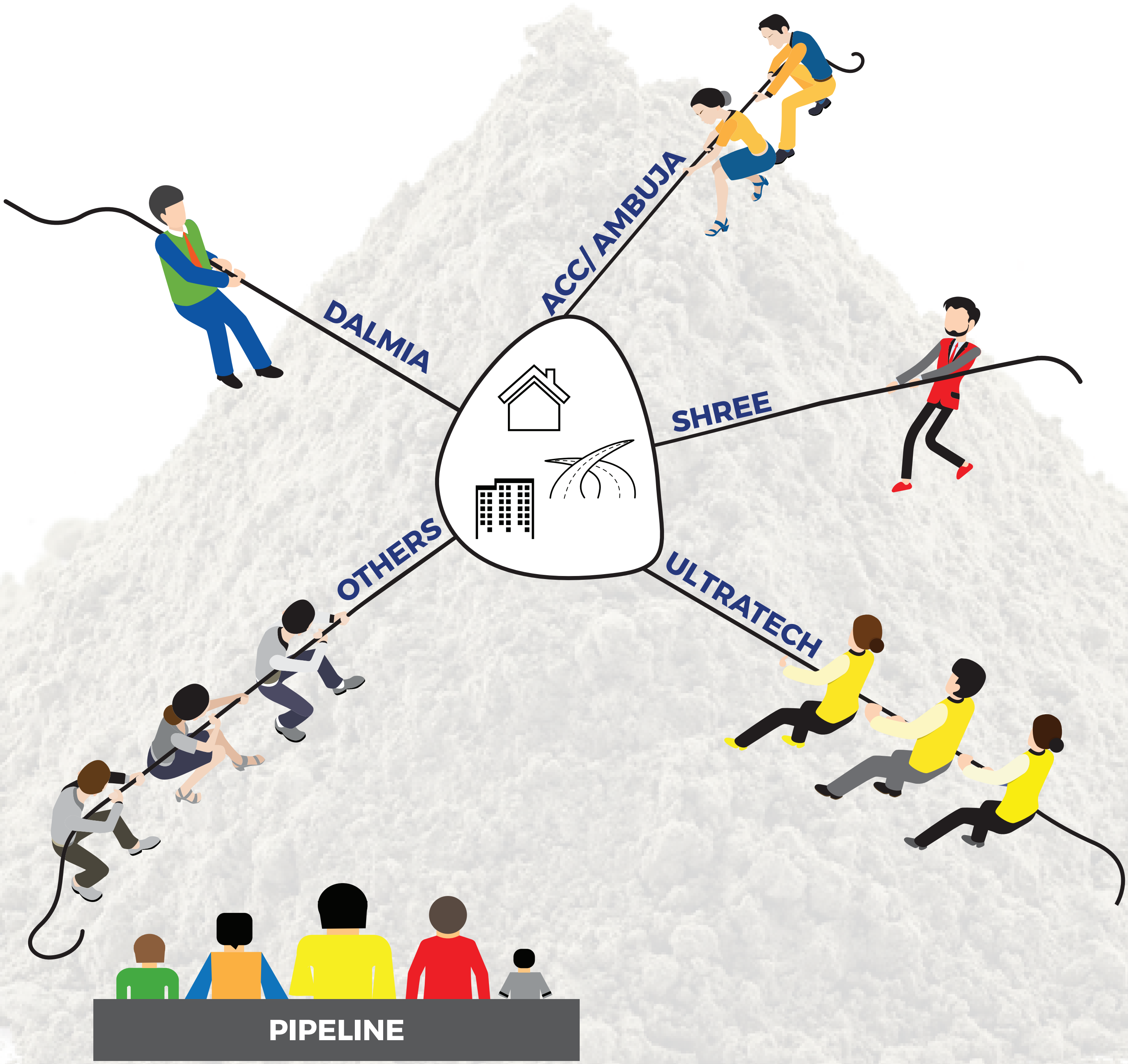
JM FINANCIAL

Identifying the next upcycle

Feasible supply pipeline of 120 MTPA for top-5 players

8-10% demand growth to gradually absorb supply surplus by FY25-26

Robust pipeline & timely execution to drive market-share gains



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INDIA CEMENT

Identifying the next upcycle

Historically, the cement industry's return profile has improved materially as the sector reaches a threshold utilisation of 80%. In this report, we analyse key aspects influencing sector utilisation: i) capacity pipeline, ii) demand dynamics and iii) capital cost. We analyse regulatory filings for the 190MTPA capacity pipeline of the top 5 cement players and find that 120MTPA of feasible capacity is likely to be operational by FY25-26. Assuming 60% market share with top five players, we believe industry is facing 200MTPA capacity pipeline.

Based on our segment-wise cement demand forecast model, we expect sustainable growth of 8-10% over medium term. We are seeing green shoots from the housing sector, driven by government initiatives (65% of cement volumes and infrastructure spend). To determine the sector's profitability benchmarks, we analyse the greenfield-brownfield split of its expansion potential. We believe the marginal return requirement of these capacities will determine sector profitability. Considering the current demand-supply dynamics, we expect the supply-demand gap to be bridged by FY25-26. Players with robust pipelines and execution capabilities would be well-placed to benefit from a demand uptick as the industry faces constraints on limestone resources and land acquisition.

We value the companies on two parameters: we consider i) their existing operations and ii) the option value of the expansion potential available. We prefer UltraTech and Dalmia in large-caps on account of the significant expansion potential in the pipeline and JK Lakshmi on account of its efforts to improve cost efficiency in the East; also, its current valuation provides a favourable entry point.

120MTPA supply pipeline underway:

In addition to the 58MTPA of announced capacity additions, the top 5 players have 120MTPA of feasible expansion potential. This will result in 7% annual capacity addition over FY20-25E. Of the 120MTPA, 49% is brownfield capacity that can be ramped up in the short-to-medium term. The South has the highest pipeline (46MTPA), followed by the East (32MTPA) and North (31MTPA).

Rural housing and Infrastructure to aid 8% CAGR in demand:

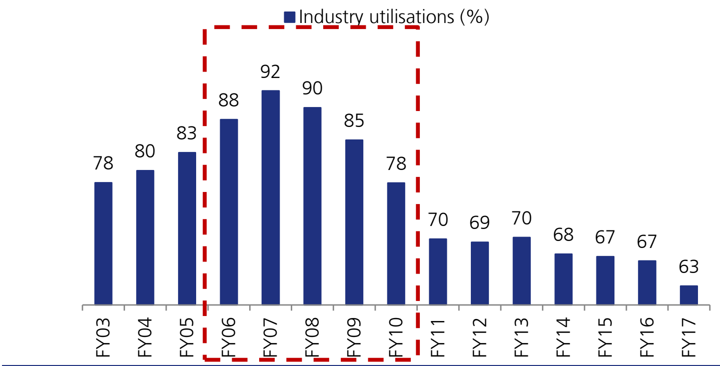
We have formulated the JM Cement Demand Model, which explicitly projects demand from urban/rural housing as well as infrastructure development. Housing demand would be driven by population growth, nuclearisation, urbanisation and government initiatives. Road construction should primarily drive infra demand, aided by metro rail, irrigation, power and high-speed rail projects. Commercial demand would follow GDP growth.

Supply demand gap to be bridged by FY25-26:

For favourable demand supply dynamics, we believe the sector utilisation has to cross 80%. With supply pipeline/additions and demand growth of 8-10% annually, we expect threshold utilisation by FY25-26. We prefer companies with robust pipelines and execution capabilities.

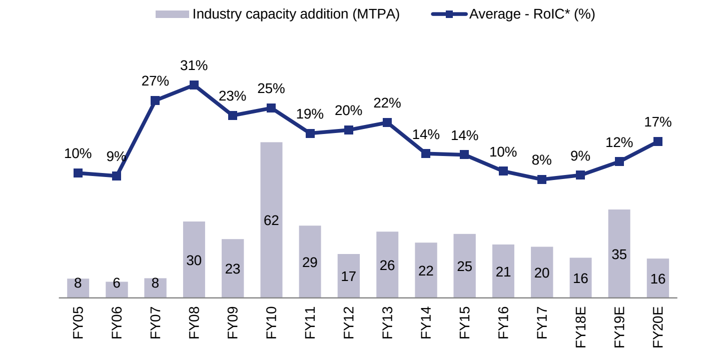
Key Charts

Exhibit 1. Higher utilisation levels in FY06-09



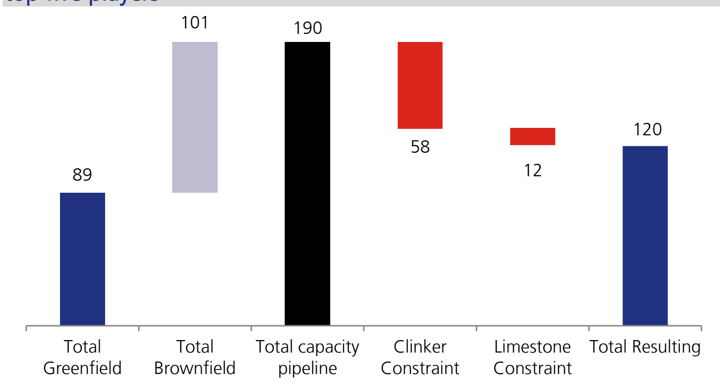
Source: Industry, JM Financial

Exhibit 2. Capacity additions follow a better profitability period



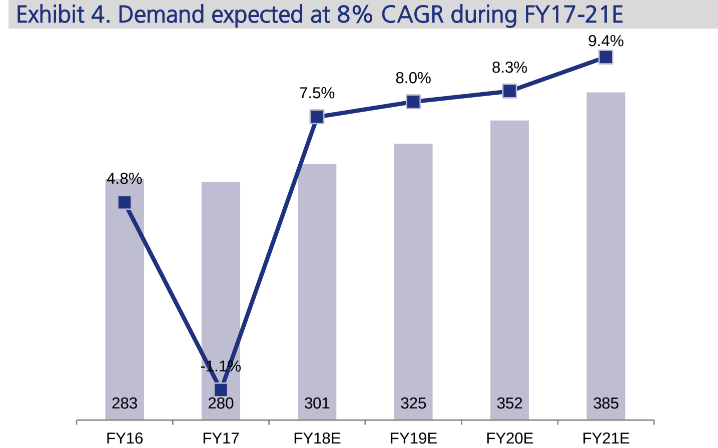
Source: Industry, JM Financial

Exhibit 3. Feasible capacity pipeline post constraints at 120MTPA for top five players



Source: Industry, JM Financial

Exhibit 4. Demand expected at 8% CAGR during FY17-21E



Source: Industry, JM Financial

Exhibit 5. Utilisation spread– upcycle by FY25-26

Source: Industry, JM Financial

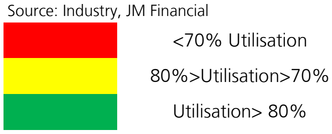
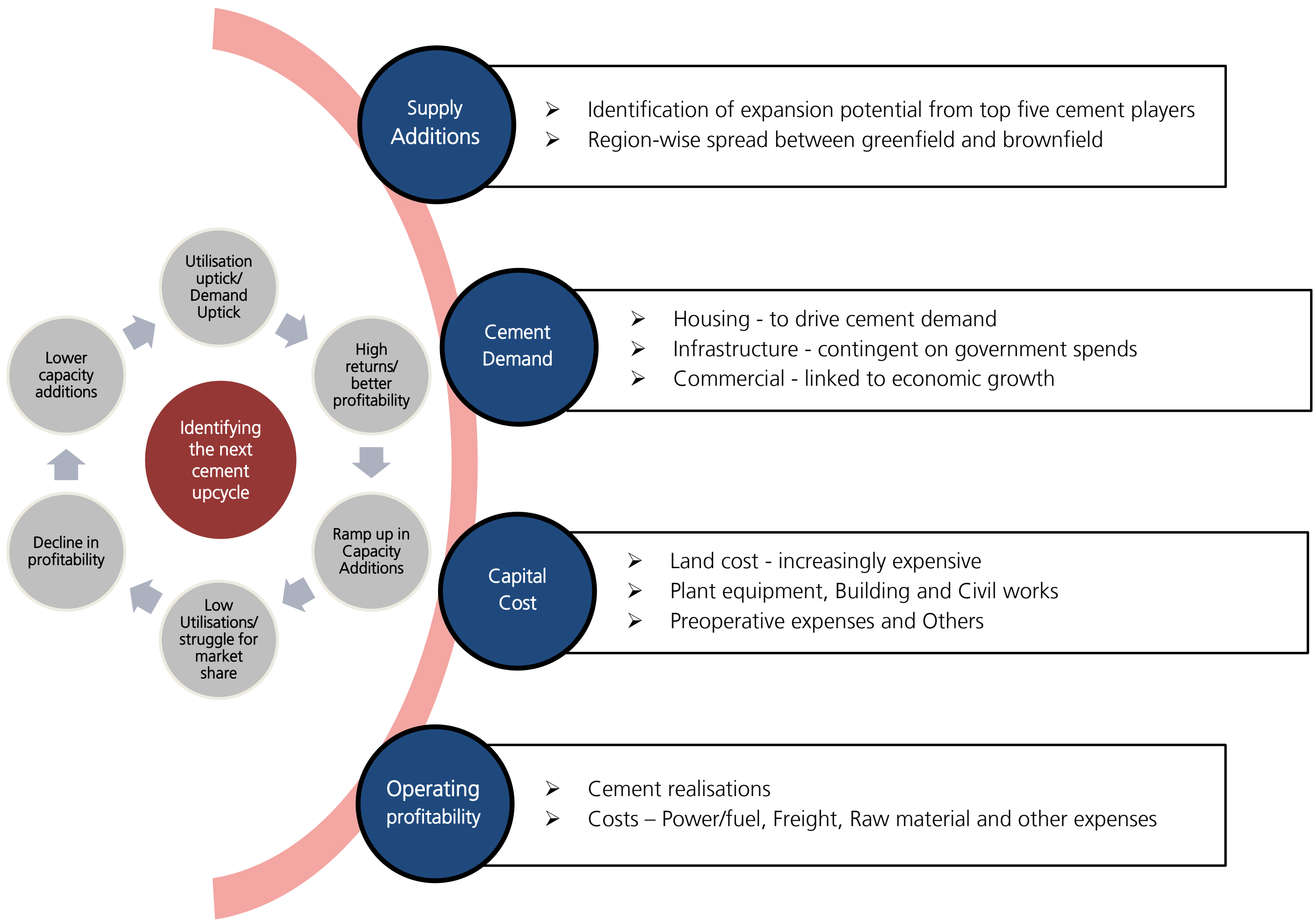


Exhibit 6. Recommendation summary

	Reco.	TP	CMP
Ultratech	BUY	4,430	3,950
Shree	HOLD	16,720	17,058
Ambuja	HOLD	260	239
ACC	HOLD	1,670	1,553
Dalmia	BUY	3,420	2,859
Ramco	HOLD	620	786
JK Cement	BUY	1,120	977
JK Lakshmi	BUY	510	440

Source: Industry, JM Financial

Identifying the next cement upcycle



Key Takeaways

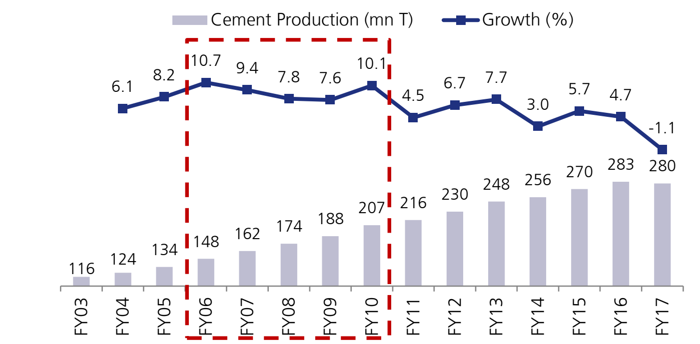
- Our analysis indicates that the sector's **utilisation levels will reach 80-85% by FY26 factoring in pipeline absorption.**
- **The Central region** has the most favourable dynamics on account of limited capacity expansion potential, while utilisation in the Southern/Eastern region is expected to remain muted.
- **EBITDA/t is expected to improve to INR 1,200-1,500/t in the next five years** for the market leaders- derived from return requirement on the incremental cost of capital. This implies an increase of INR400-500/t from current levels which will give cement players headroom till utilisations improve. Pricing discipline will be key for earnings predictability in the short term. Sector return profile will improve materially as supply-demand gap reduces.
- Regions with higher brownfield expansion potential (North and East) would have lower EBITDA/t requirements as against those with high greenfield additions (South).
- Demand growth remains contingent upon economic growth, with infrastructure (10% CAGR over FY17-21E) and housing (9% CAGR over FY17-21E) being key drivers. We estimate an 8% CAGR over FY17-21E for demand, based on JM Cement demand model.
- We prefer Ultratech/Dalmia in large-caps, while in mid-caps our top pick is JK Lakshmi Cement.

Analysing the cement cycle FY07-17

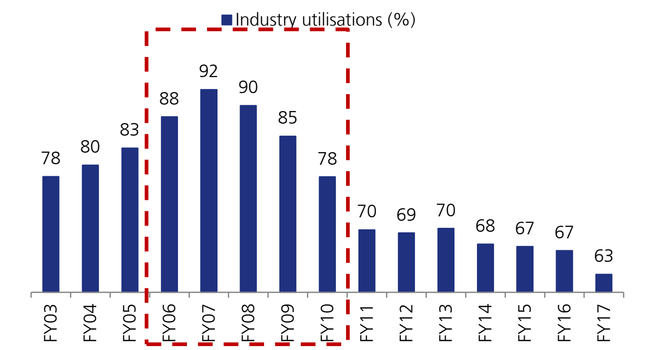
- India's cement sector last witnessed a spurt in demand over FY05-11 on account of growth in housing and government infrastructure projects.
- As utilisations improved to above-80% levels in FY06-07, players' return profiles improved on better operating leverage and an improved ability to pass on cost escalations.

Exhibit 7. High growth period led to better utilisations

Growth in cement volumes led by housing/infra



Higher utilisation levels in FY06-09

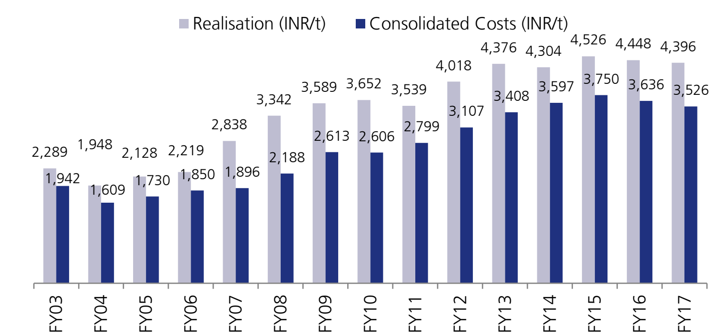


Source: JM Financial, Industry

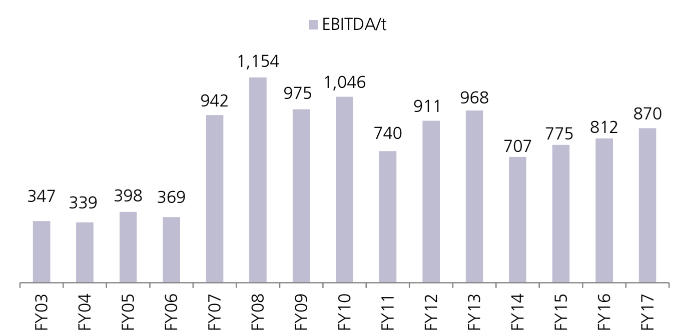
- The capex cycle round began as the utilisation levels peaked during the period of FY06 to FY09. Subsequently, the capacity additions outran the volume growth leading to decline in utilisation levels. Players' ability to pass on the cost escalations was impacted leading to subdued margins.

Exhibit 8. Margins declined continuously

Costs growth outruns realisation growth



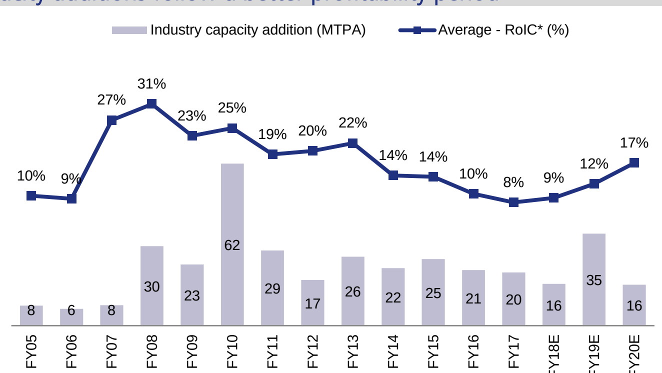
EBITDA/t declining since FY13



Source: Company, JM Financial, Industry

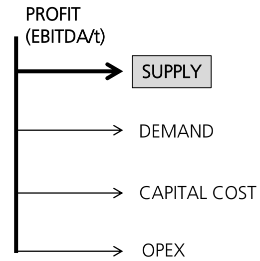
- Better return profiles of the existing players led to a spurt in capacity additions. Due to the subsequent drop in demand growth and as the capacities came online, the industry's utilisation levels gradually declined, leading to lower profitability and hence a decline in return profiles.

Exhibit 9. Capacity additions follow a better profitability period



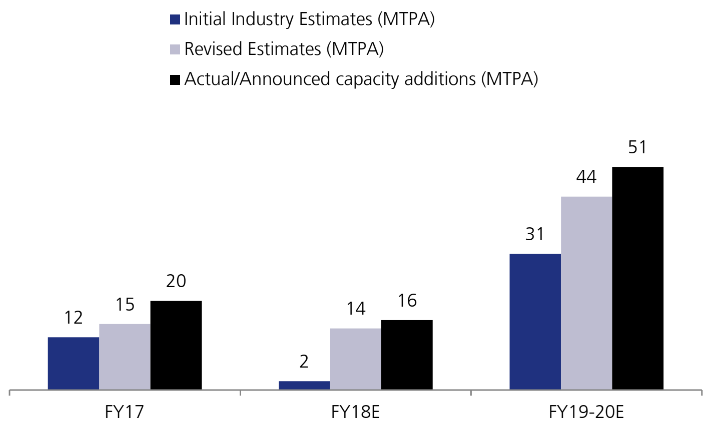
Source: Company, JM Financial, Industry | * average of Ambuja, ACC and Ultratech

Supply analysis the key to determining industry cycles



- Supply is the key determinant in a cement cycle; high capacity additions during FY08-10 led to a significant decline in utilisation (despite 8-10% demand growth), leading to margin erosion.
- Industry estimates peg FY21 capacity addition at 12MTPA, while capacity addition over the next 2 years should be 53MTPA.
- Historically, actual capacity additions and expectations have differed significantly, with initial estimates understating actual capacity additions.
- We believe estimating incremental supply precisely is extremely important to chart the return profile in the sector. However, to take a medium-term perspective, we need to analyse the capacities in the pipeline (approvals obtained/in the process of approval) to gauge the potential system supply likely to come through.

Exhibit 10. Expectation vs. actual capacity additions



Source: Industry, JM Financial

- In order to determine the industry utilisation levels in varying demand growth scenarios, we need to have significantly higher confidence on the supply addition over a longer tenure.
- As part of the supply analysis, we are following a two-stage model:

I. **Explicit supply projections for FY19-20** by analysis of capacity additions announced by companies.

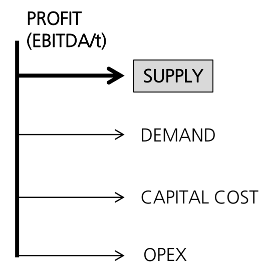
II. **Mine/capacity approval analysis** filed with regulators for players with 50% market share and determining the post-constraint capacity possible.

Exhibit 11. Identifying the capacity pipeline - Methodology

- To identify the expansion potential available with the top 5 players, we accessed their filings with the Ministry of Environment, Forest and Climate Change (MOEF) to obtain environment clearances.
- Limestone availability is a key raw material. We have excluded the expansion potential available for plants with less than 10 years of limestone reserves on the expanded capacity. In addition, we assume that inter-regional clinker movement would be restricted.
- We are assuming land acquisition for greenfield/brownfield plants without constraints. Unavailability of land or high acquisition costs will be key monitorables.
- We assume 60% market share for the top 5 players in capacity addition (vs. 40% historically) to arrive at an all-India capacity pipeline estimate. We are assuming land acquisition for greenfield/brownfield plants without constraints. Unavailability of land or high cost of acquisition will be key monitorables.

Source: JM Financial

51MTPA capacity addition over FY19-20



- Based on our analysis of capacity addition/expansion announced till date, we expect 51mnT of capacity to be added during FY19-20. FY18 capacity addition is expected at 20mnT.
- Maximum capacity is expected to be added in the South (16MTPA) followed by West (15MTPA). Southern capacities are being added in the regions of AP/Telangana (which are growing rapidly on account of government infrastructure projects) and Karnataka.
- The Central and North has the lowest expansion projects in the pipeline. However, the central region is seeing incremental supply on account of the utilisation ramp-up of Jaiprakash's capacities by Ultratech.

Exhibit 12. Capacity additions in the pipeline

	FY12P	FY13P	FY14P	FY15P	FY16P	FY17P	FY18P	FY19E	FY20E	Pipeline Capacity FY19-20E
South	10	10	1	4	5	0	3	14	2	**16**
North	3	4	6	8	5	6	4	3	2	**5**
West	2	7	0	4	4	0	1	8	7	**15**
East	5	1	7	7	3	13	8	7	3	**10**
Central	2	4	7	3	4	1	0	4	2	**5**
All India	**22**	**26**	**22**	**25**	**21**	**21**	**16**	**35**	**16**	**51**

Source: Company, JM Financial, Industry

Exhibit 13. FY18 capacity addition

Name	Region	State	Capacity (MTPA) *
Shree Cement	Aurangabad	Bihar	0.9
Shree Cement	Aurangabad	Bihar	2.0
Shree Cement	Sriganganagar	Rajasthan	3.6
JSW Cement	Salboni	West Bengal	2.4
JSW Cement	Bellary	Karnataka	2.4
JSW Cement	Dolvi	Maharashtra	1.2
NCL industries	Suryapet	Telangana	0.8
Emami Cement	Cuttack	Orissa	2.0
Dalmia Cement	Medinipur	WB	0.7
Total			15.9

Source: Company, JM Financial | * Based on capacities announced and news reports

Exhibit 14. FY19 capacity addition

Name	Region	State	Capacity (MTPA) *
Wonder Cement	Dhule	Maharashtra	2.0
Shree Cement	Aurangabad	Bihar	3.5
Shree Cement	Kodla, Gulbarga	Karnataka	3.0
Emami Cement	Udaipur	Rajasthan	3.0
Emami Cement		AP	2.0
Ultratech	Dhar	MP	3.5
KCP	Mukthalya	AP	1.7
JK Lakshmi	Cuttack	Orissa	0.6
Penna Cement (AP)	Boyareddypalli	AP	2.6
Ramco Cement	Kolaghat	WB	1.1
Ramco Cement	Vizag	AP	1.1
Ramco Cement	Haridaspur	Orissa	0.9
CCI	Vishakhapatnam	AP	2.0
Birla Corp	Mukutban	Maharashtra	4.0
JSW Cement	Dolvi	Maharashtra	2.3
Dalmia Cement	Medinipur	WB	0.7
Anjani Portland Cement	Gudimalkapuram	Telangana	1.2
Total			35.1

Source: Company, JM Financial | * Based on capacities announced and news reports

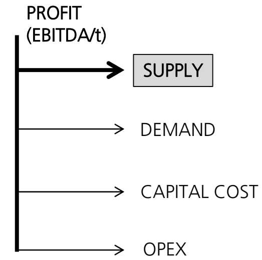
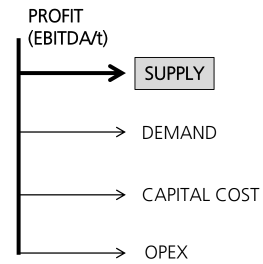


Exhibit 15. FY20 capacity addition

Name	Region	State	Capacity (MTPA) *
JSW Cement	Salboni	WB	1.2
JSW Cement	Jajpur	Odisha	1.2
Adani Cementation	Mundra	Gujarat	2.0
Adani Cementation	Udupi	Karnataka	2.0
JK Cement	Mangrol	Rajasthan	1.0
JK Cement	Nimbahera	Rajasthan	1.0
JK Cement	Aligarh	UP	1.5
JK Cement	Silvassa	Gujarat	0.7
Sanghi Cement	Kutch	Gujarat	4.0
Star Cement	Siliguri	WB	1.0
Total			15.6

Source: Company, JM Financial | * Based on capacities announced and news reports

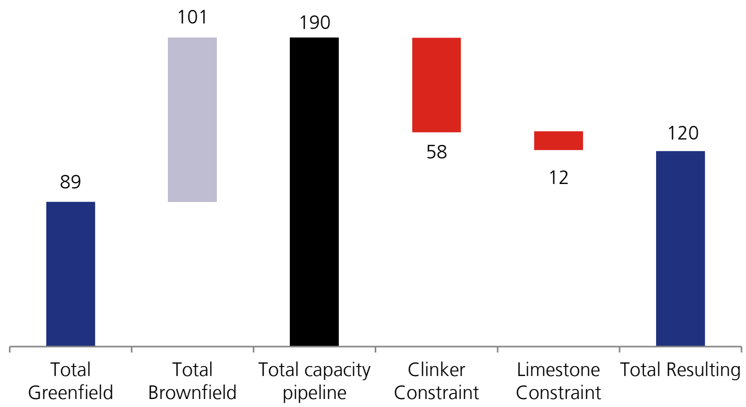
Analysing the industry's capacity pipeline



120MTPA potential from top five players

- We analysed the projects proposed by ACC, AMbuja, Ultratech (including Jaiprakash), Shree and Dalmia (including OCL) through regulatory filings, to arrive at the sector's expansion potential. Further, we have categorised the expansion as greenfield and brownfield as this will determine the following: a) the lead time required for capacity addition (brownfield 2-3 years; greenfield 3-4 years) and b) the capital required for expansion (linked to EBITDA/t requirement).
- We estimate an <u>expansion potential of c.120 MTPA from the top 5 players in the industry</u>, with the limestone and clinker constraints factored in. Additionally, c.50% of the expansion potential available is brownfield.

Exhibit 16. Feasible pipeline post constraints at 120MTPA



Source: Company, Industry, JM Financial

Player-wise capacity addition potential

Exhibit 17. ACC key capacity additions in the pipeline

	State	Region	Type	Cement (MTPA)	Clinker (MTPA)
Greenfield					
Gollapalli	AP	Souh	integrated	8.0	5.0
Uttarakhand	Uttarakhand	North	Grinding	2.0	
Brownfield					
Kudithini	Karnataka	South	Grinding	1.8	
Wadi	Karnataka	South	Integrated	0.7	2.3

Source: Company, Industry, JM Financial

Exhibit 18. Ambuja key capacity additions in the pipeline

	State	Region	Type	Cement (MTPA)	Clinker (MTPA)
Greenfield					
Budavada, Gogulapadu, Guntur	AP	South	Integrated	5.8	3.3
Bhanpura, Mandsaur	MP	Central	Grinding	1.5	
Brownfield					
Marawar Mundhwa	Rajasthan	North	Integrated	4.5	1.3
Darlaghat - Rauri – Solan	HP	North	Integrated	1.5	0.4

Source: Company, Industry, JM Financial

Exhibit 19. Shree Cement key capacity additions in the pipeline

	State	Region	Type	Cement (MTPA)	Clinker (MTPA)
Greenfield					
Pedagarlapad, Guntur	AP	South	Integrated	4.0	2.4
Pune	Maharashtra	West	Grinding	5.5	
Brownfield					
Baloda Bazar	Chattisgarh	East	Integrated	13.5	8.3
Ras	Rajasthan	North	Integrated	6.2	3.8

Source: Company, Industry, JM Financial

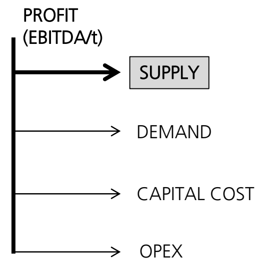


Exhibit 20. Dalmia key capacity additions in the pipeline

	State	Region	Type	Cement (MTPA)	Clinker (MTPA)
Greenfield					
Cement plant at Chittorgarh	Rajasthan	North	Integrated	5.0	3.3
Proposed plant at Gulbarga	Karnataka	South	Integrated	4.0	2.6
Brownfield					
Kadapa	AP	South	Integrated	1.5	0.9
Grinding unit at Salboni	WB	East	Grinding	2.7	

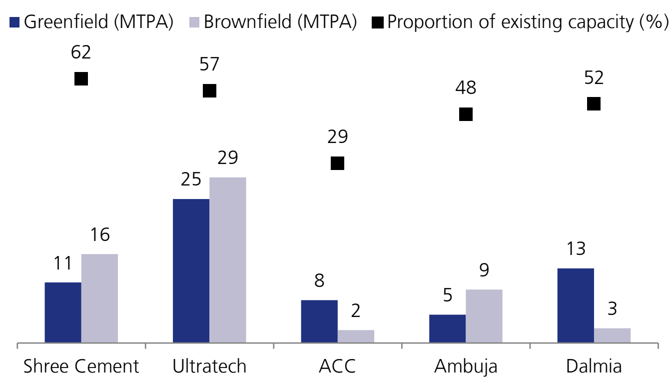
Source: Company, Industry, JM Financial

Exhibit 21. Ultratech key capacity additions in the pipeline

	State	Region	Type	Cement (MTPA)	Clinker (MTPA)
Greenfield					
Petnikota Kolimigundla Kurnool	AP	South	Integrated	6.0	4.0
Greenfield plant at Karur	TN	South	Integrated	5.5	4.5
Brownfield					
Hirmi - HCW	Chattisgarh	East	Integrated	4.9	4.8
Sewagram	Gujarat	West	Integrated	4.8	4.4

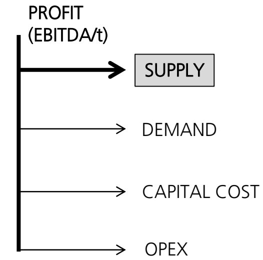
Source: Company, Industry, JM Financial

Exhibit 22. Player-wise/Region-wise feasible expansion potential



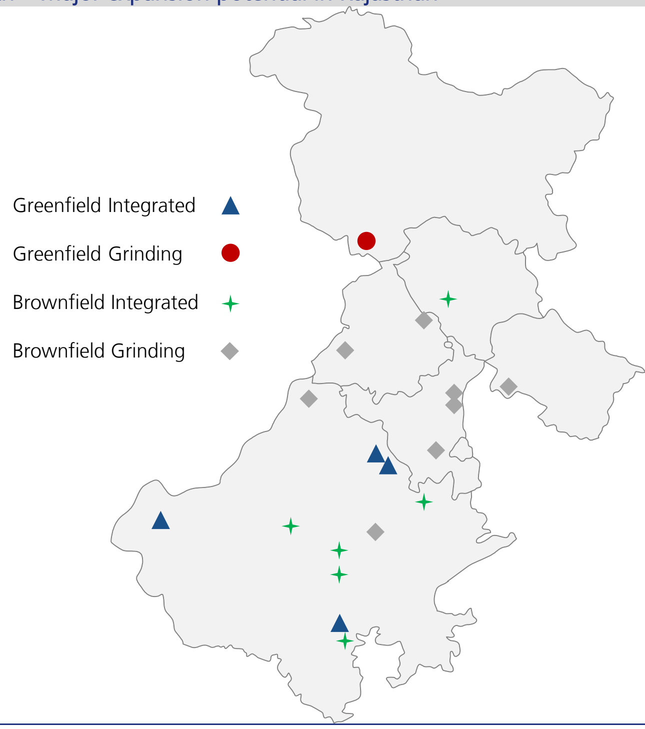
Source: JM Financial, Industry

- A region-wise split shows that the Southern region has the highest expansion potential (46MTPA), while Central has the lowest (2MTPA).
- South has the highest greenfield expansion potential (33MTPA), while the Eastern region has the highest brownfield potential (25MTPA).
- Ultratech - with the expansion potential of 55MTPA - is best placed to tap the demand uptick in cement volumes.
- Shree has a significant clinker constraint of 32MTPA, limiting the company's growth potential to 27MTPA
- ACC (10MTPA), Ambuja (16MTPA) and Dalmia (16MTPA) have limited expansion potential with the existing clearances they have available.



- **North – c.31MTPA expansion potential: The** North has c.17.5MTPA of greenfield and c.13.5MTPA of brownfield expansion potential. Most of the integrated potential is available in Rajasthan owing to large limestone reserves in the region. Other states have satellite grinding units.

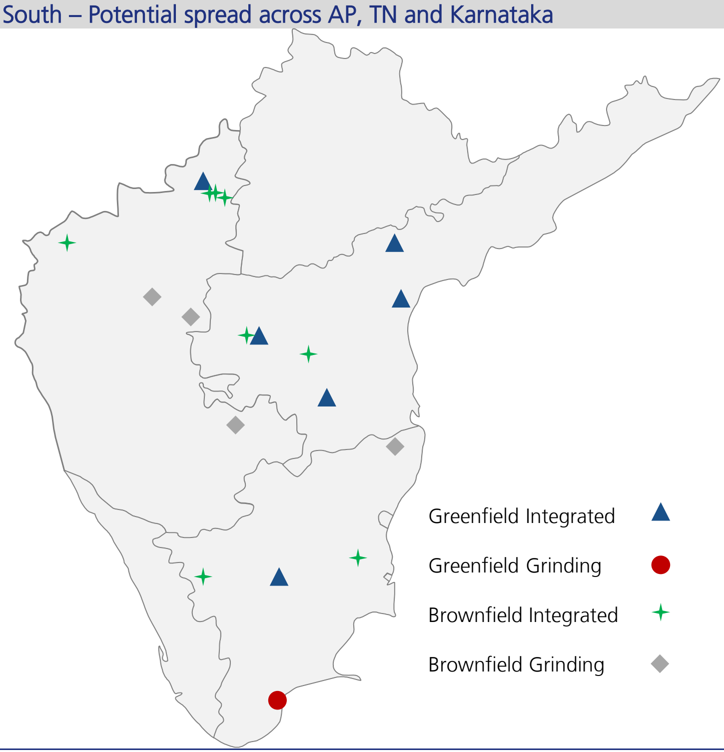
Exhibit 23. North – Major expansion potential in Rajasthan



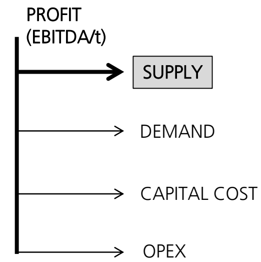
Source: Company, JM Financial

- **South – c.45.5MTPA expansion potential:** South has the highest greenfield expansion potential of c.32.7MTPA. The region has brownfield potential of c.13MTPA. Integrated potential is spread across North Karnataka and AP. South, already a saturated market in terms of cement capacity, has the highest expansion potential.

Exhibit 24. South – Potential spread across AP, TN and Karnataka

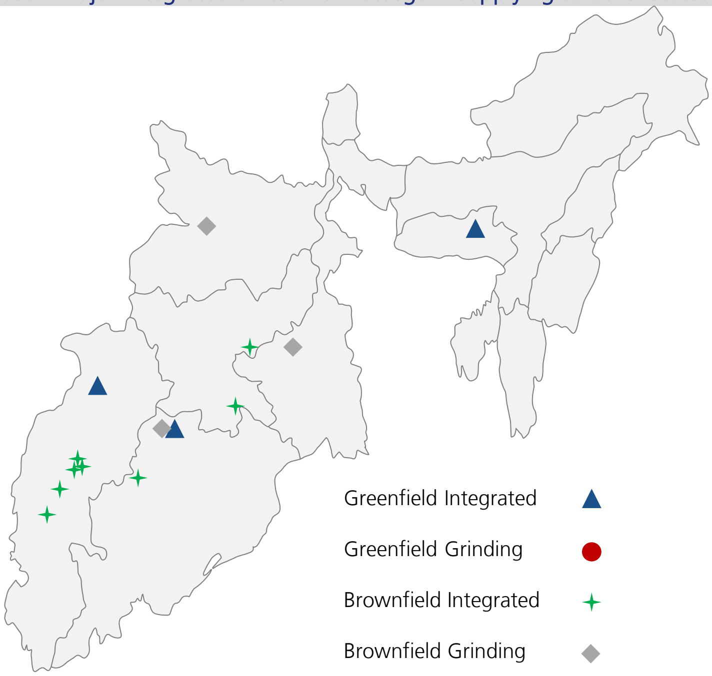


Source: Company, JM Financial



- **East – c.32MTPA expansion potential:** The East has the highest brownfield expansion potential of c.22MTPA. It has a greenfield potential of c.9MTPA. The integrated potential is concentrated around Chhattisgarh and some parts of Jharkhand and Odisha.

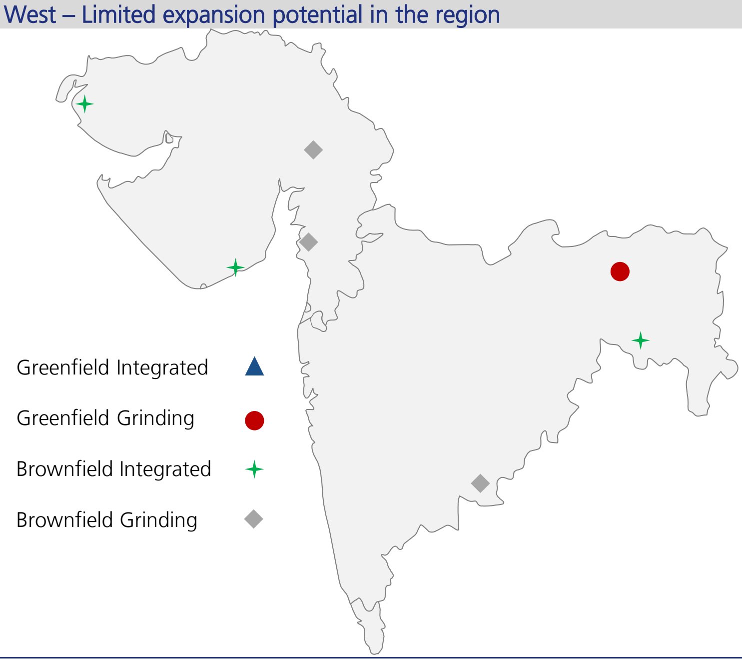
Exhibit 25. East – Major Integrated units in Chhattisgarh supplying to other states



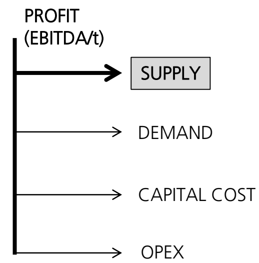
Source: Company, JM Financial

- **West – c.10.6MTPA expansion potential:** The West has c.2MTPA of greenfield and c.8.6MTPA of brownfield expansion potential. Most of this is concentrated in Gujarat and eastern Maharashtra.

Exhibit 26. West – Limited expansion potential in the region

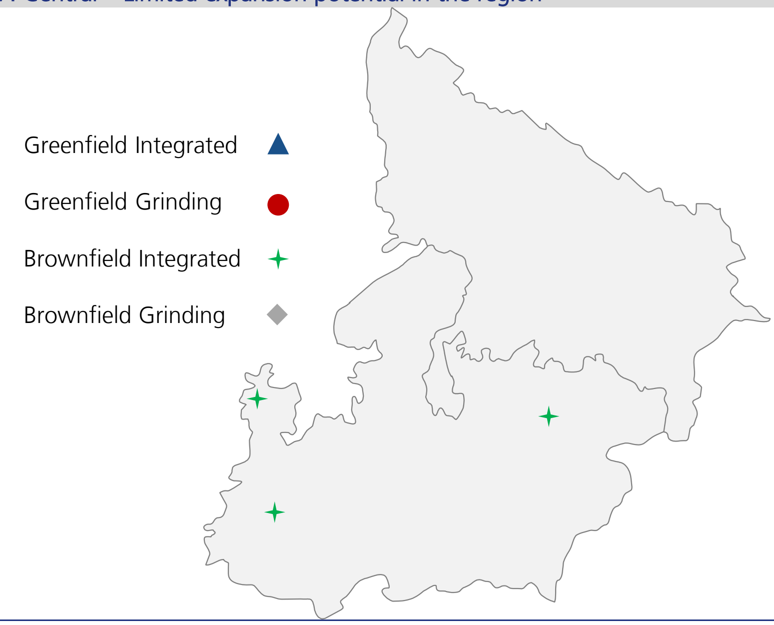


Source: Company, JM Financial



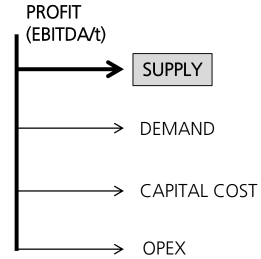
- **Central – c.1.65MTPA expansion potential:** Central has brownfield expansion potential of c.1.65MTPA, most of which is concentrated in MP.

Exhibit 27. Central – Limited expansion potential in the region



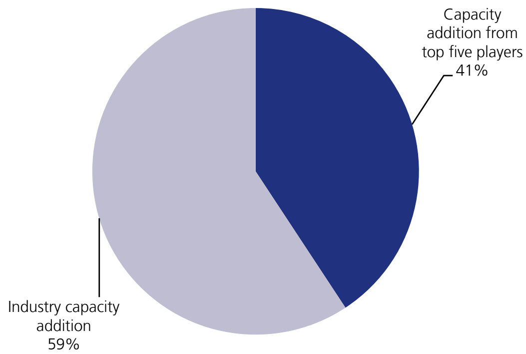
Source: Company, JM Financial

Top 5 players contributed 40% to the FY12-17 capacity additions



- The top five players – over the last six years (FY12-17) – have added a total of 56MTPA capacity, which forms c.40% of the total capacity added (138MTPA).

Exhibit 28. c.40% capacity addition share of the top players

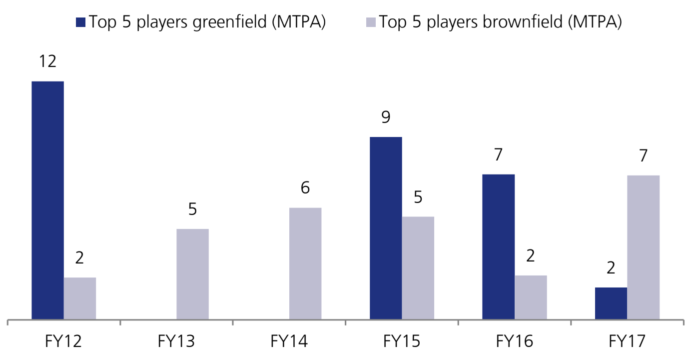


Source: Company, JM Financial, Industry

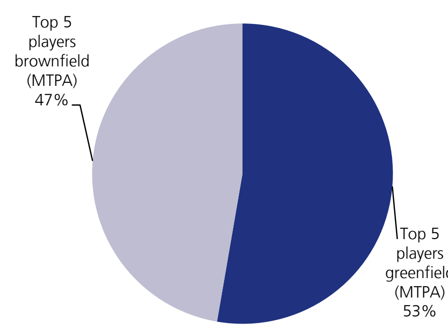
- Of the total 56MTPA added by these players, 53% represented greenfield expansion.

Exhibit 29. Capacity addition by top five players historically

Top five players accounted for 40% of the capacity addition in last 5-6 years



c.52% if the capacity addition was brownfield expansion

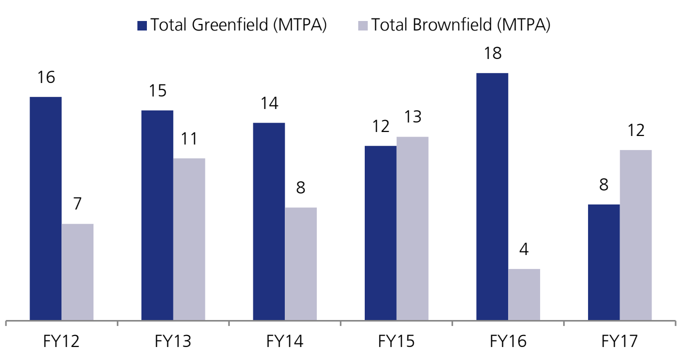


Source: Company, JM Financial, Industry | Includes JP assets

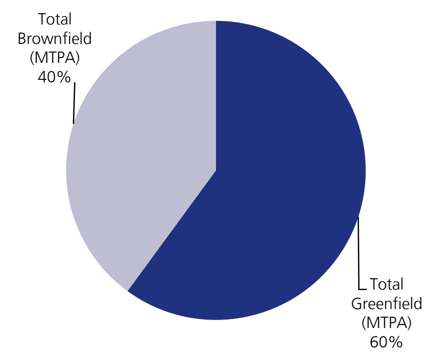
- Of the 138MTPA added in the last six years (FY12-17), 60% represented greenfield expansion.

Exhibit 30. Last five years greenfield/brownfield expansion

Capacity addition in the last six years FY12-17

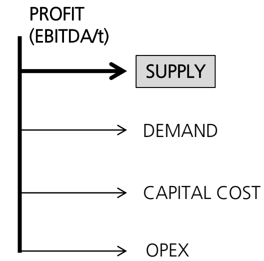


Proportion of Greenfield/Brownfield



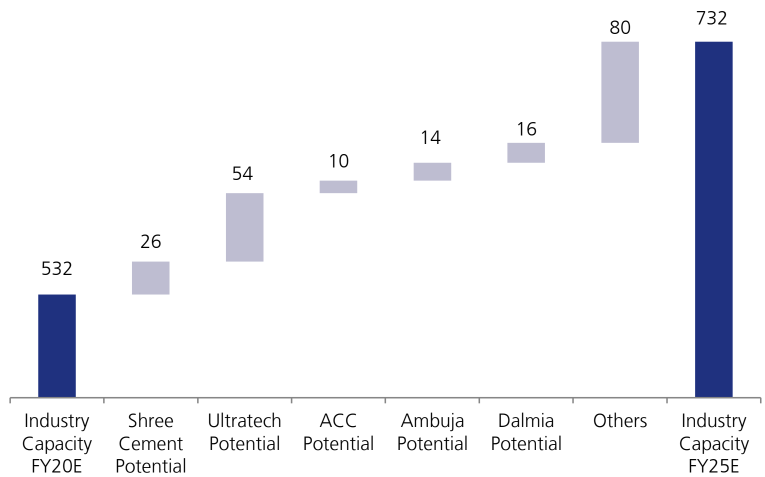
Source: JM Financial, Industry

200mnT capacity pipeline factored in the JM Cement Industry Model



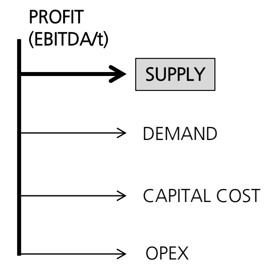
- While the top 5 players historically have added 40% of the capacity commercialised, limestone and land constraints could lead to an increase in the ratio going forward.
- Setting up a new capacity will become incrementally difficult on account of increasing competitive intensity in the limestone bidding process. Limited availability of limestone, rising costs of limestone (auction-based) and land costs are adding to the entry barriers in the cement industry.
- Based on these, we have incorporated a conservative assumption of 60% incremental capacity share to be captured by the top five players (vs. 40% captured over FY12-17) in our base case.
- After the addition of the potential capacities, industry capacity will stand increased to c.730MTPA from c.530MTPA estimated capacity at end-FY20E.
- Key upside risk to our supply estimates would be higher-than-expected capacity addition from regional players.

Exhibit 31. c.732 MTPA - Industry capacity in FY25/26E



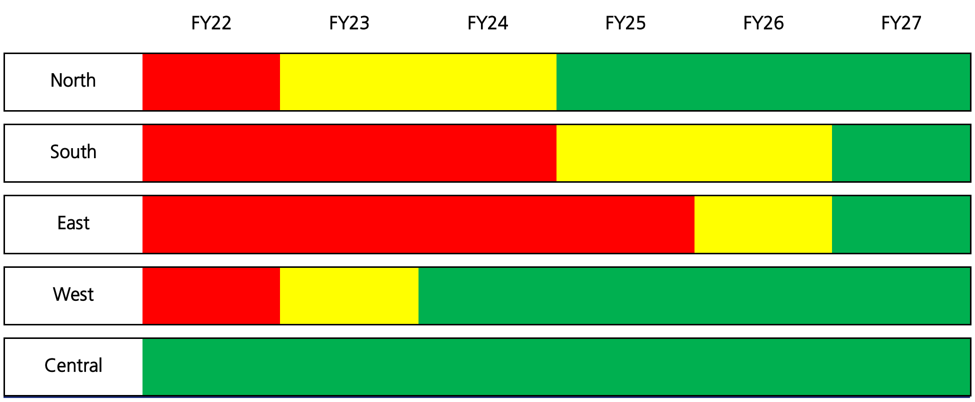
Source: Company, JM Financial, Industry

Scenario analysis: all-India utilisation levels to cross 80% by FY26

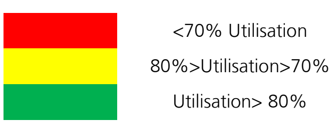


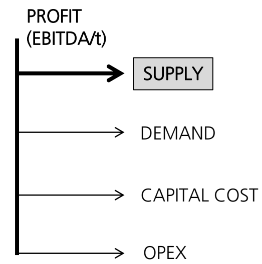
- Based on the last cement upcycle, we believe the improvement in cement companies' return profiles would be contingent upon utilisation levels. As the industry touches utilisation levels of 80%, cement players' pricing power will improve.
- We performed a scenario analysis to determine a timeline by when the demand-supply scenario would become favourable for the cement sector (80-85% utilisation). While the execution timeline of pipeline potential is not predictable, we believe uptick in demand will trigger the commissioning of these capacities. We determine the potential utilisation of industry as the pipeline capacity is commissioned.
- We expect the Southern and Eastern regions to enter the upcycle the last (by 2026E) on subdued utilisation levels currently and higher expansion potential available (46MTPA and 34MTPA, respectively) to companies in these regions.
- In our base case we have assumed 10% CAGR volume growth post FY20E and top five players will contribute 60% to the incremental capacity addition
- Please refer annexure 1 for worst case and best case scenarios.

Exhibit 32. Utilisation spread across geographies – upcycle by FY26



Source: JM Financial, Industry

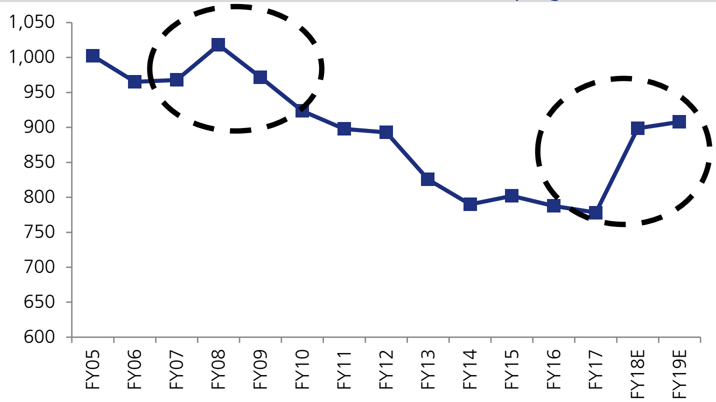




What can surprise? Industry Consolidation

- The Indian cement industry saw a phase of de-consolidation during FY08-14, where several regional players added capacity to tap cement demand.
- However, since FY14, the industry has seen a phase of consolidation, with the assets of Jaiprakash Associates and Reliance cement acquired by incumbents. Additionally, stressed assets (Binani, Kalyanpur and Murli Industries) are being acquired by larger players.
- The extent of consolidation is visible in the Herfindahl Hirschman Index (exhibit below) with the consolidation score back to FY05-09 levels.
- Consolidation in the market could result in disciplined supply addition, thus giving players higher pricing power.

Exhibit 33. Herfindahl-Hirschman index – Consolidation in progress



Source: Company, JM Financial, Industry

Exhibit 34. Consolidation cycle – Capacity share of top five players increasing

Top Five players	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18E
Ultratech-Group Companies	34	34	36	47	54	66	66	67	69	73	83	88	90	112
Holcim	36	38	39	44	44	49	53	56	59	59	60	61	63	63
Jaiprakash Associates	13	14	15	16	16	24	28	39	39	39	31	33	33	
India Cement	9	9	9	10	11	14	16	16	16	16				
Ramco Cement	8	8	8		11								16	16
Dalmia						14					24	24	25	27
Shree Cement				10			15	15	15	18	24	26	29	36
Acquisition/Stressed assets														10
Total	**101**	**103**	**108**	**127**	**136**	**167**	**177**	**192**	**197**	**204**	**221**	**231**	**257**	**264**
Capacity share of top 5 players (%)	57%	56%	56%	57%	55%	55%	55%	56%	53%	52%	53%	52%	56%	55%

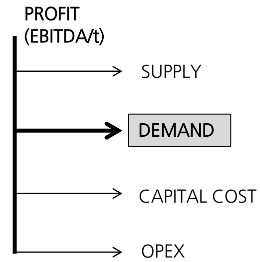
Source: Company, JM Financial, Industry

- Consolidation in the industry has been accompanied by the entry of new and aggressive players such as JSW Cement, Nirma, Emami and Adani Cementation. However, although new players have entered the market, their capacity share as of now is only 9-10%. Limited resources and high land acquisition costs makes the entry of new players prohibitive.

Exhibit 35. New players entering the market

	FY15	FY16	FY17	FY18E	FY19E	FY20E
JSW Cement	5.8	6.8	6.8	12.8	15.1	17.5
Nirma Cement		2.3	12.7	12.7	12.7	12.7
Emami			4.0	6.0	11.0	11.0
Adani Cementation						4.0

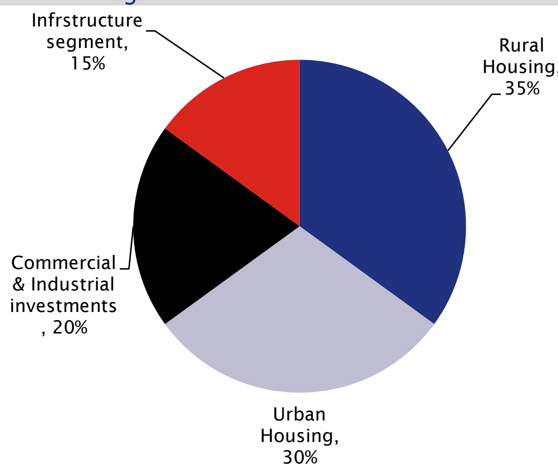
Source: JM Financial, Industry



Demand Outlook – 8% CAGR over FY17-21E driven by housing and infra

- A major proportion of cement demand comes from housing. Rural housing contributes 35% to the cement demand and 30% of the cement demand comes from Urban housing
- Infrastructure segment, constituting 15% of the total cement volumes includes roads, railways, bridges, dams, power plants, irrigation projects and others
- Commercial segment, accounts for 20% of the cement volumes, comprises of offices complexes, malls and others.

Exhibit 36. Cement demand segment-wise



Source: JM Financial, Industry

JM Cement demand outlook summary

- The JM Cement demand model explicitly projects demand from segments forming >70% of total cement consumption- Urban/Rural housing and roads.
- We expect the overall cement demand to grow 8% each year over FY17-21E on the back of growth in housing and infrastructure segments.
- **Housing** – We expect cement demand from housing to post a 9% CAGR over FY17-21E. Housing demand would be led by the rural segment, which is expected to benefit from government schemes targeting the construction of c.29mn houses by 2022. Urban housing growth is expected from government schemes promoting affordable housing. Cheaper availability of funds under the Credit Linked Savings Scheme (CLSS) scheme would spur cement growth in the urban areas, especially in economically weak segments (EWSs) and low income groups (LIGs).
- **Infrastructure** – We expect cement demand from the infrastructure segment to post a CAGR of 10% over FY17-21E, primarily from road construction.
- **Commercial** – We are factoring in commercial segment's demand inline with GDP growth expectations (7%).
- **Overall** – We expect the cement demand to grow at 8% CAGR over FY17-21E.

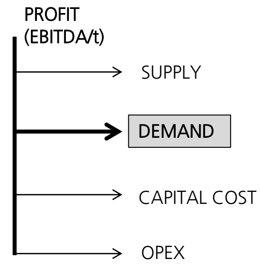
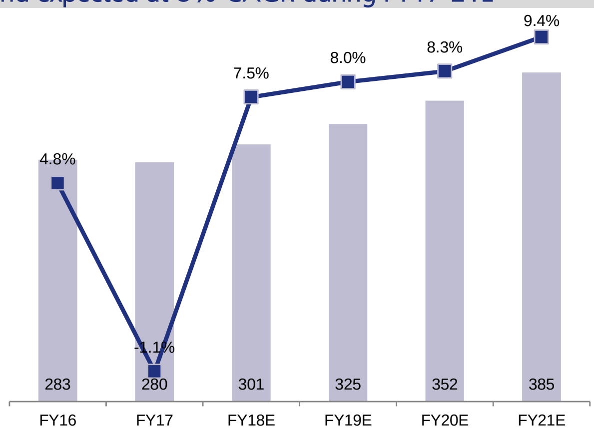


Exhibit 37. Volume growth from various segments (mnT)

Cement volumes	FY15	FY16	FY17	FY18E	FY19E	FY20E	FY21E	CAGR over FY17-21E
Housing	175	184	182	196	210	229	253	9%
Rural Housing	94	99	98	106	113	125	142	10%
Urban Housing	82	85	84	90	97	104	111	7%
Infrastructure	52	57	56	61	69	75	81	10%
Roads	16	18	17	20	25	28	31	16%
Power	13	14	14	15	15	16	16	4%
Irrigation	11	12	12	13	14	15	16	8%
Urban Infra	9	10	10	10	11	12	13	8%
Others	3	3	3	4	4	4	5	8%
Commercial	42	43	42	44	46	49	51	5%
Industrial	19	19	19	20	21	22	23	5%
Commercial	23	23	23	24	25	27	28	5%
Total	270	283	280	301	325	352	385	8%

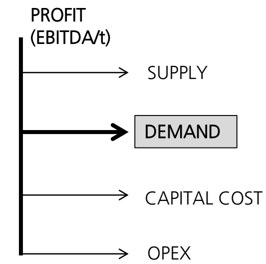
Source: JM Financial, Industry

Exhibit 38. Demand expected at 8% CAGR during FY17-21E



Source: JM Financial

Housing – 9% CAGR over FY17-21E driven by rural housing



- As per the 2011 census, India's population was recorded at 1.21bn. Assuming a growth rate of 1.4% annual growth rate the population is expected to reach 1.39bn by 2021.
- As per the 2011 census, c.31% of India's population resides in urban areas. The Ministry of Urban Development estimates this to reach 40% by 2031.
- The average number of members per household is expected to decline at an 8.4% decadal rate in rural areas (from 4.94 in 2011 to 4.53 in 2021) and 9.4% decadal rate in urban areas (from 4.66 in 2011 to 4.22 in 2021).
- With declining household sizes (nuclearisation) despite population growth, the number of families with housing requirements would only rise. In this backdrop, housing will continue to be major demand driver for the cement industry for years to come.

Exhibit 39. Incremental households with housing requirement

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
India's overall population (mn)	1,211	1,228	1,245	1,262	1,280	1,298	1,316	1,335	1,353	1,372
RuralpPopulation in India (mn)	834	840	846	852	859	865	871	878	884	890
% of rural population	69%	68%	68%	68%	67%	67%	66%	66%	65%	65%
Members per household	4.9	4.9	4.9	4.8	4.8	4.7	4.7	4.6	4.6	4.6
Households (mn)	168.6	171.4	174.2	177.0	179.9	182.8	185.8	188.8	191.8	194.9
Incremental households – Rural (mn)		2.8	2.8	2.8	2.9	2.9	3.0	3.0	3.0	3.1
Urban (mn)	377	388	399	410	421	433	445	457	469	482
Members per household	4.7	4.6	4.6	4.5	4.5	4.4	4.4	4.4	4.3	4.3
Households (mn)	80.9	84.0	87.2	90.6	94.0	97.6	101.3	105.0	109.0	113.0
Incremental households - Urban (mn)		3.1	3.2	3.3	3.4	3.6	3.7	3.8	3.9	4.0
Total Incremental households (mn)		5.9	6.0	6.2	6.3	6.5	6.6	6.8	7.0	7.1

Source: JM Financial, Industry

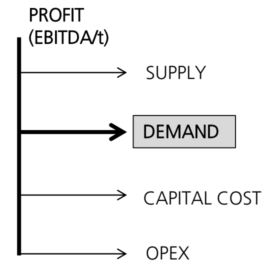
Rural housing (35% of India's cement volumes) – c.10% CAGR over FY17-21E

- We calculated the demand from rural housing assuming 600 sq ft as the average size of a rural house and a requirement of 25kgs of cement per sq ft for its construction. The cement requirement for the conversion of a semi-pucca house to pucca is assumed to be c.18kgs.
- We are assuming that c.66% of the housing requirement from population growth and nuclearisation would be created by Indira Awas Yojana (IAY) and Pradhan Mantri Awas Yojana (PMAY- Grameen/Rural).

Exhibit 40. Cement demand from rural housing

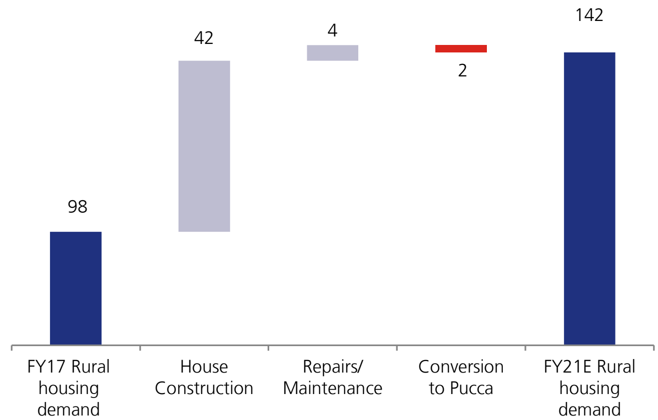
	FY15	FY16	FY17	FY18E	FY19E	FY20E	FY21E
Cement demand from housing construction on population growth/urbanisation/nuclearisation and government schemes (IAY)							
Incremental households (mn Units)	2.8	2.9	2.9	3.0	3.0	3.0	3.1
IAY catering to 66% of the incremental households (mn Units)	2.0	2.0	2.1	2.0	2.0	2.0	2.0
Incremental houses not covered by IAY/PMAY				1.0	1.0	1.0	1.1
Incremental IAY units to cater to houseless (mn Units)				0.4	0.9	1.6	2.7
Demand from Household increase (mnT) (A)	42.6	43.2	43.7	50.4	57.8	69.1	85.9
Cement demand from housing on conversion of semi pucca houses to pucca houses							
Number of houses converting from semi pucca – Rural (mn Units)	1.3	1.3	1.3	1.2	1.2	1.1	1.1
Cement demand from conversion – Rural (mnT) (B)	14.1	13.6	13.2	12.7	12.3	11.8	11.4
Cement demand from repairs/maintenance/expansion/incremental houses/kutcha to pucca houses							
Houses involved (mn Units)	3.6	4.0	3.9	4.1	4.1	4.2	4.3
Cement Demand (mnT) (C)	37.4	42.4	41.0	42.8	43.4	44.1	44.9
Total Rural Cement Demand (mnT) (A+B+C)	**94.1**	**99.2**	**97.9**	**105.8**	**113.5**	**125.1**	**142.1**

Source: JM Financial, Industry



- **PMAY Grameen:** We believe that an uptick in cement demand in rural India would be led by the government's Housing for All scheme. The government has set a target to construct 29.5mn houses by 2022 under PMAY-Grameen to accommodate the country's homeless. Even with the assumption of 70% completion of the target, the industry could realise around c.270mnT of cement demand from the scheme.
- **Budget 2018-19:** The government reduced its allocation towards PMAY (Grameen/Rural) to INR 210bn in the 2018-19 budget from INR 230bn in the 2017-18 budget. The program foresees the construction of 4.9mn houses in rural areas in FY19.

Exhibit 41. Incremental rural uptick from IAY/PMAY schemes



Source: JM Financial, Industry

- Till Dec'17, 32% of the Ministry of Rural Development's FY18 target number of houses had been completed.

Exhibit 42. Rural housing progress under various schemes

	FY15	FY16	FY17	FY18E
Target (mn)	2.48	2.23	4.33	3.24
Completed (mn)	1.96	1.81	2.30	1.03
% achieved	79%	81%	53%	32%

Source: JM Financial, Industry

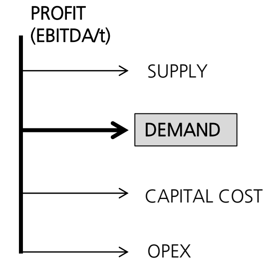
Urban housing (30% of India cement volumes) – c.7% CAGR over FY17-21E

- We calculated the demand from urban housing assuming an average size of 600 sq ft for an urban house and 25kgs of cement per sq ft for its construction. The cement requirement for the conversion of a semi-pucca house to pucca is assumed to be c.18kgs.

Exhibit 43. Cement demand from urban housing

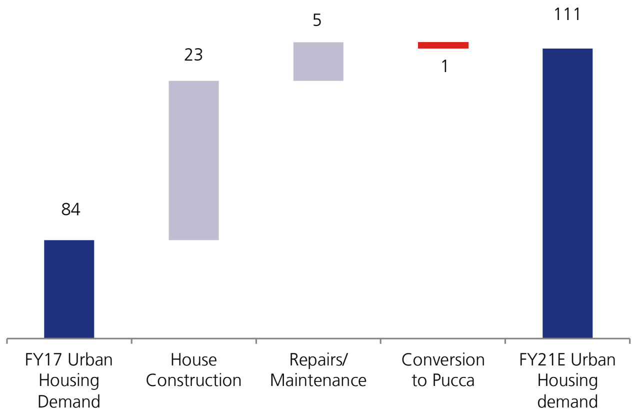
	FY15	FY16	FY17	FY18E	FY19E	FY20E	FY21E
Cement demand from housing construction on population growth/urbanisation/nuclearisation and government schemes (PMAY)							
Incremental households (mn Units)	3.3	3.4	3.6	3.7	3.8	3.9	4.0
Houses constructed under PMAY Urban (mn Units)				0.5	0.8	1.1	1.4
Demand from Household increase (mnT) (A)	55.8	57.4	59.1	62.6	68.9	75.3	81.7
Cement demand from housing on conversion of semi pucca houses to pucca houses							
Number of houses converting from semi pucca – Rural (mn Units)	0.3	0.3	0.3	0.2	0.2	0.2	0.2
Cement demand from conversion – Rural (mnT) (B)	3.3	3.0	2.7	2.5	2.2	2.0	1.8
Cement demand from repairs/maintenance/expansion/incremental houses/kutcha to pucca houses							
Houses involved (mn Units)	2.1	2.2	2.0	2.2	2.3	2.4	2.5
Cement Demand (mnT) (C)	22.7	24.6	22.1	24.7	25.6	26.6	27.6
Total Urban Cement Demand (mnT) (A+B+C)	**81.8**	**85.0**	**83.9**	**89.8**	**96.8**	**103.9**	**111.1**

Source: JM Financial, Industry



- PMAY Urban: The government estimates a shortfall of 12.4mn houses in urban areas. Even with 60% completion of the target (number of houses), cement has a demand potential of c.117mnT from the scheme.
- Budget 2018-19: The government allocated INR 65.05bn towards PMAY (Urban) in the 2018-19 budget (increased from INR 60.43bn in the 2017-18 budget). The CLSS component of the PMAY (Urban) allocation is INR 19bn vs. INR 14bn previously.
- CLSS for EWS and LIG was allocated at INR 10bn vs. INR 8bn previously.
- CLSS II for middle income groups (MIGs) was allocated at INR 9bn vs. INR 6bn earlier.
- The programme component of INR 46bn is for the sanction of central assistance towards 3mn houses approved by states and the completion of 2.1mn houses by states and UTs.

Exhibit 44. Volume growth from urban housing



Source: JM Financial, Industry

- The government is targeting to complete 29.5mn houses in rural areas and 12.4mn houses in urban areas by 2022 under the "Housing for All by 2022" scheme as per the media reports. We estimate cement demand to post an 9% CAGR over FY17-21E from housing, led by a rise in the number of houses constructed from PMAY Urban and Grameen. However, demand growth is contingent upon the execution of these schemes by the government.
- Additionally, the government plans to establish a dedicated Affordable Housing Fund (AHF) in the National Housing Bank and raise INR 250bn from non-budgetary resources.

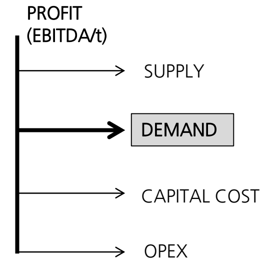
PMAY updates:

- As of Mar'18, 4.06mn houses were involved for the PMAY urban scheme of which 1.8 mn houses were grounded for construction. However, only 0.34mn houses were completed under the scheme

Exhibit 45. PMAY urban progress

	Apr'17	May'17	Jul'17	Aug'17	Oct'17	Nov'17	Dec'17	Jan'18	Feb'18	Mar'18
Houses Involved	1.77	1.88	2.10	2.40	2.86	2.86	3.20	3.74	3.74	4.06
Houses Grounded for construction	0.54	0.69	0.80	0.99	1.15	1.22	1.41	1.65	1.67	1.80
Completed	0.09	0.10	0.13	0.13	0.20	0.22	0.29	0.31	0.32	0.34

Source: JM Financial, Industry



Key players to benefit from government spending on housing

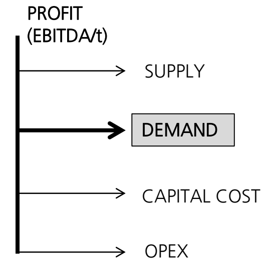
- Key states that are going have elections in the next two years are Rajasthan, MP, AP, Telangana, Karnataka, Odisha, Chhattisgarh, Jharkhand, Maharashtra, Gujarat, Haryana and North eastern states. Additionally, UP and Bihar are key beneficiaries of government housing schemes. The following players will be the key beneficiaries from incremental government capex as a run-up to the election.
- East and South India are expected to emerge as major beneficiaries of government housing schemes.

Exhibit 46. Number of houses involved in government housing schemes

States	Region	Cumulative housing Urban and Rural (number of units)	Players having exposure to these states
MP	Central	8,48,840	Ultratech, Heidelberg, Birla Corp, Century Textiles Orient (after JP unit acquisition)
AP	South	7,32,308	Ultratech, Ramco, Dalmia, Sagar, KCP Cement, Deccan, Orient, NCL industries, Kesoram
UP	Central	6,91,680	Ultratech, Heidelberg, Birla corp, Mangalam
Bihar	East	6,63,985	Shree cement, Century Textiles, ACC, Birla Corp, JK Lakshmi, Ultratech
TN	South	5,22,941	Ramco, India cement, Dalmia, Sagar
WB	East	5,20,241	Dalmia-OCL, ACC, Ambuja, Century Textiles
Orissa	East	4,20,530	Dalmia-OCL, Ramco, Sagar
Karnataka	South	3,88,340	Sagar, Ultratech, Orient, ACC, Kesoram, JK Cement
Maharashtra	West	3,14,876	ACC, Ambuja, Ultratech, Century Textiles, Orient
Jharkhand	East	3,13,810	ACC, JK Lakshmi, Century Textiles
Chhattisgarh	East	2,97,331	Shree Cement, JK Lakshmi, Ultratech, ACC, Dalmia-OCL, Ambuja
Rajasthan	North	2,75,084	JK Cement, Shree Cement, JK Lakshmi, Ultratech, Birla corp, Mangalam
Gujarat	West	2,73,193	Ambuja, Ultratech, Sanghi, Saurashtra Cement
Telangana	South	2,09,725	Ultratech, Ramco, Dalmia, Sagar, KCP Cement, Deccan, Orient, NCL industries, Kesoram
Others		5,01,049	
Total		69,73,933	

Source: JM Financial, Industry

Infrastructure- Roads c.16% CAGR over FY17-21E



- **Budget 2018-19:** In the budget 2018-19, the National Highway Development Programme has been subsumed under Bharatmala phase I. Total budget allocation for NHAI in 2018-19 has been increased to INR 296.6bn from INR 238.9bn in 2017-18.
- **NHDP:** The total length targeted to be completed under NHDP in 2018-19 is 4,500kms. The programme's target for completion was 55,943kms, of which 33,500kms had been completed as at end-Dec'17. The remaining length has been subsumed under Bharatmala Phase I.

Exhibit 47. National Highway targets

	Budget outlay (INR mn)	Deliverable (Kms)
Bharatmala Phase I	2,96,631	4,500
EAP (World Bank/JICA/ADB)	12,000	200
LWE including Vijayawada Ranchi Corridor	29,400	500
Outlay for North East region	62,100	950
Total	**4,00,131**	**6,150**

Source: JM Financial, Industry

- **Bharatmala –** The government foresees the completion of 34,800kms of roads under phase I of Bharatmala by 2021-22. Of the 34,800kms under Bharatmala phase I, 10,000 kms fall under National Highway construction under the National Highway Development Programme.

Exhibit 48. Targets under Bharatmala Phase I

Components	Length (km)	Outlay (INR bn)
Economic corridors development	9,000	1,200
Inter-corridor & feeder roads	6,000	800
National Corridors Efficiency improvements:	5,000	1,000
Border & International connectivity roads	2,000	250
Coastal & port connectivity roads	2,000	200
Expressways	800	400
Balance road works under NHDP	10,000	1,500
Total	**34,800**	**5,350**

Source: Industry, JM Financial

- Total demand potential from road construction under Bharatmala Phase I is c.19.5mn T

Exhibit 49. Cement demand potential from Bharatmala

Bharatmala project	
Bharat Mala target (kms)	34,800
Cement required (tonne/km)	560*
Total demand (mnT)	**19.5**

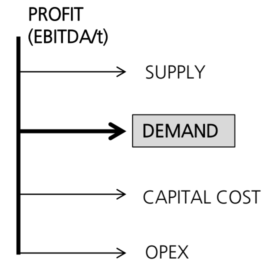
Source: JM Financial, Industry | * Assumption of 560t of cement requirement for a km of road construction under Bharatmala

- **PMGSY:** The government is targeting the construction of 57,000kms of rural roads under PMGSY with a budget outlay of INR 190bn in 2018-19 (increased from INR 169bn in the revised budget 2017-18). However, we believe the cement used under this scheme would represent c.50% of the cement used in the construction of highways/National Highways.
- Road construction under PMGSY posted a CAGR of 8.5% over FY12-17. Assuming this growth rate continues, we estimate cement demand potential of c.46mnT over FY19-21E.

Exhibit 50. Demand potential from PMGSY

PMGSY	FY12	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E	FY20E	FY21E
Target	30,566	30,000	26,950	21,775	33,649	48,812	51,000			
Progress	31,618	27,812	27,339	38,056	35,155	47,446	47,603			
% Completion	103%	93%	101%	175%	104%	97%	93%			
Completion assumed								51,628	55,994	60,729
Efficiency (kms/day)	86.62	76.20	74.90	104.26	96.32	129.99	130.42	141.45	153.41	166.38
Growth								8.5%	8.5%	8.5%
Cement Demand from Road construction						**12.81**	**12.85**	**13.94**	**15.12**	**16.39**

Source: JM Financial, Industry | 270 tonnes per km per lane of cement usage is assumed



- Assuming 15% CAGR growth in the construction of Highways/National Highways, we estimate an incremental demand from road construction to be c.25mnT over FY19-21E.

Exhibit 51. Demand potential from Road Construction

	FY17	FY18E	FY19E	FY20E	FY21E
Roads					
National Highways	8,030	10,950	12,593	14,491	16,644
Efficiency (Kms constructed/day)	22.00	30.00	34.50	39.70	45.60
Government targets	15,000	15,000			
Demand from Road construction* (mnT)		6.19	7.12	8.19	9.41

Source: JM Financial, Industry | * assuming 560t of cement requirement for construction of 1km of 1lane concrete road and all national highway to be built from cement concrete

Metro

- The execution of metro rail projects has been driving cement demand under the Urban Infra segment. We estimate c.450km of metro lines to be constructed over FY19-22E.

Exhibit 52. Cement demand from Metro Projects

	FY18E	FY19E	FY20E	FY21E	FY22E
Metro Lines Expected completion (KMs)	79.24	135.69	129.57	109.58	81.37

Source: JM Financial, Industry | Based on news reports of metro lines under construction

High-speed rail corridors

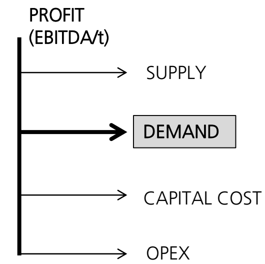
- Cement demand is expected to get a boost on the construction of high-speed rail corridors. The Cement Manufacturers Association (CMA) estimates an additional 3.5MT of cement demand annually from one project.
- Currently, the Mumbai-Ahmedabad High-speed rail corridor is being implemented. Other projects in the pipeline are still at a nascent stage.

Exhibit 53. High-speed rail corridor projects

Sr No	Route description	Status	Agency
Diamond Quadrilateral Routes			
1	Delhi-Mumbai	Feasibility study in progress	Consortium of Third Railway Survey and Design Institute Goupd Corporation (CHINA) and Lahmeyer International (India) Pvt. Ltd.
2	Mumbai-Chennai	Feasibility study in progress	SYSTRA_RITES_E&Y Consortium
3	Chennai-Kolkata	Yet to be taken up	
4	Delhi-Kolkata	Feasibility study in progress	Consortium of M/s INECO (SPAIN) - M/s TYPSA - M/s Intercontinental Consultants and Technocrats Pvt Ltd, India
5	Delhi-Chennai	Delhi Nagpur is being taken up as phase I under government to government cooperation	Planning study report completed by China Railway SIYUAN survey and Design group co ltd. Feasibility study is yet to be taken up
6	Mumbai-Kolkata	Mumbai Nagpur is being taken up as phase I under government to government cooperation	ADIF, Spain and INECO, Spain
Other Important Corridors			
7	Mumbai-Ahmedabad	Project under Implementation	national High Speed Rail Corporation Ltd (NHRCL) under Japanese financing
8	Delhi-Chandigarh-Amritsar	Pre-Feasibility study completed	SYSTRA_RITEA Consortium
9	Howrah-Haldia	Pre-Feasibility study	INECO Spain
10	Delhi-Patna	Pre-Feasibility study	Mott McDonald, India
11	Thiruvananthapuram-Mangalore	DPR Completed	DMRC India
12	Hyderabad-Dornakal-Vijaywada-Chennai	Pre-Feasibility study	Parsons Brinckerhoff India Pvt. Ltd.
13	Chennai-Bengaluru-Coimbatore-Ernakulam	Pre-Feasibility study	Consortium of JARTS (Japan Railway Technical Service) and oriental consultants

Source: JM Financial, Industry

Irrigation



- 16 irrigation projects have been identified and given the national projects status.
- The execution of these projects will be a big boost to cement demand going forward. As per industry estimates, 4% of cement demand comes from irrigation projects.

Exhibit 54. Irrigation projects

Name	Budget/Cost	Status	Irrigation	Hydel power
Polavaram Multipurpose Project (AP)	5,20,000	Under execution	4.68	960
Gosikhurd Irrigation Project (Maharashtra)	77,779	Under execution	2.50	3
Shahpurkandi Dam Project (Punjab)	22,858	Under execution	0.37	168
Saryu Nahar Pariyojna (UP)	72,703	Under execution		
Teesta Barrage Project (WB)	29,886	Under execution	9.23	1000
Kulsi Dam Project (Assam)	11,393	Appraisal Stage	0.02	55
Noa-Dihing Dam Project (Arunachal Pradesh)	10,861	Appraisal Stage	0.00	71
Renuka Dam Project (Himachal Pradesh)	52,429	Appraisal Stage		40
Kishau Multipurpose Project (Himachal Pradesh/Uttarakhand)	71,932	Appraisal Stage	0.97	660
Ujh Multipurpose project (Jammu & Kashmir)	36,307	Appraisal Stage	0.32	212
Ken Betwa Link Project Phase-I (MP and UP)	1,80,571	Appraisal Stage	6.35	78
Lakhwar Multipurpose Project (Uttarakhand)	39,665	Appraisal Stage	0.03	300
Upper Siang Project (Arunachal Pradesh)		PFR stage		9500
Gyspa HE Project (Himachal Pradesh)		Detailed project report (DPR) Stage	0.50	300
Bursar HE Project (Jammu & Kashmir)		DPR stage	1.00	1230
2nd Ravi Vyas Link Project (Punjab)		PFR stage		

Source: JM Financial, Industry

Other Infrastructure Projects

- Sagarmala: Under the programme, 415 projects have been identified with an investment of c.INR 8tn over 2015-35. These include port modernisation, new port development, port connectivity enhancement and port-linked industrialisation.

Exhibit 55. Projects under Sagarmala

Project Theme	FY16		FY17		FY18		FY19		FY20 to FY25		FY26 to FY35	
	No. of projects	Project Cost (INR bn)	No. of projects	Project Cost (INR bn)	No. of projects	Project Cost (INR bn)	No. of projects	Project Cost (INR bn)	No. of projects	Project Cost (INR bn)	No. of projects	Project Cost (INR bn)
Port Modernisation	62	277	46	227	13	22	20	355	27	266	21	282
Connectivity Enhancement	30	159	58	289	28	166	26	1,397	17	212	11	82
Port-Linked Industrialisation	2	3	1	30	2	50	17	944	11	3,181	-	-
Coastal Community Development	4	1	4	5	3	1	4	7	8	28	-	-

Source: JM Financial, Industry

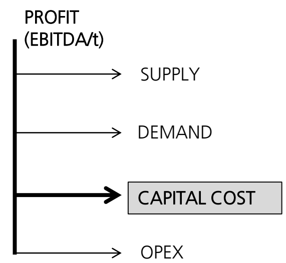
Commercial-Factoring in 5% annual demand growth

Exhibit 56. Commercial Projects- favourable vacancies to help growth in certain geographies

	Supply (msf)	Absorption (msf)	Vacancy	Under Construction/ Planning (msf)
NCR	100.0	4.0	27%	31.8
Bangalore	120.6	8.0	5%	25.4
Pune	44.6	2.3	8%	20.1
Mumbai	80.2	3.1	18%	14.9
Chennai	49.1	2.2	9%	6.2
Kolkatta	24.5	0.8	38%	2.1
Hyderabad	41.0	4.9	7%	5.7
Total	**460.0**	**25.3**	**15%**	**106.1**

Source: Cushman & Wakefield, JM Financial

Capital cost- Key in determining the return profile



- The capital cost of setting up a cement plant varies depending on the type of project: greenfield/brownfield, debottlenecking/expansion or grinding/integrated.
- In the recent past, companies have announced projects at an average cost of c.USD 110/t for a greenfield integrated project, while for a brownfield integrated project the average cost announced was c.USD 50/t.

Exhibit 57. Cost incurred in setting up a cement plant

Company Name	Location	Region	Cement (MTPA)	Clinker (MTPA)	Integrated/grinding	Greenfield/Brownfield	Capex (INR mn)	Cost/t (USD/t)
Shree	Aurangabad, Bihar	East	0.90		Grinding	Brownfield	170	2.91
Shree	Aurangabad, Bihar	East	5.50		Grinding	Brownfield	3,350	9.37
Shree	Sriganganagar, Rajasthan	North	3.60		Grinding	Brownfield	3,000	12.82
Ramco	Vishakhapatnam, AP	South	1.10		Grinding	Brownfield	4,450	62.24
Ramco	Kolaghat, WB	East	1.10		Grinding	Brownfield	2,500	34.97
KCP Cement	AP	South	1.70		Integrated	Brownfield	4,000	36.20
Sanghi	Gujarat	West	4.00	3.30	Integrated	Brownfield	12,500	48.08
JSW Cement	Salboni	East	1.20		Grinding	Brownfield	3,000	38.46
NCL Industries	AP	South	0.75	1.00	Integrated	Brownfield	2,000	41.03
JSW Cement	Salboni	East	2.40		Grinding	Greenfield	8,000	51.28
Ultratech	Dhar, MP	Central	3.50	2.00	Integrated	Greenfield	26,000	114.29
Ultratech	Pali, Rajasthan	North	3.50	2.20	Integrated	Greenfield	18,500	81.32
Shree	Gulbarga, Karnataka	South	3.00	2.80	Integrated	Greenfield	18,000	92.31
Ambuja	Marwar Mundhwa, Rajasthan	North		1.70	Clinker	Greenfield		
Ramco	Haridaspur, Odisha	East	0.90		Grinding	Greenfield	4,400	75.21
Birla Corp	Mukutban, Maharashtra	West	4.00		Integrated	Greenfield	24,000	92.31
Ramco Cement	Vishakhapatnam, AP	South	1.00		Grinding	Greenfield	4,750	73.08
Adani	Mundra, Gujarat	West	2.00		Grinding	Greenfield	5,563	42.79
Emami Cement	Udaipur, Rajasthan	North	3.00		Integrated	Greenfield	30,000	153.85
Emami Cement	Jajpur, Odisha	East	2.00		Grinding	Greenfield	6,000	46.15
Emami Cement	Panagarh, WB	East	2.00		Grinding	Greenfield	5,000	38.46
Nirma	Pali, Rajasthan	North	2.00		Integrated	Greenfield	15,000	115.38
Dalmia Cement	Belgaum, Karnataka	South	2.50		Integrated	Greenfield	13,440	89.60
Emami Cement	Risda, Chhattisgarh	East	4.40	2.40	Integrated	Greenfield	26,500	100.38

Source: Company, JM Financial, Industry | based on news reports, company announcements

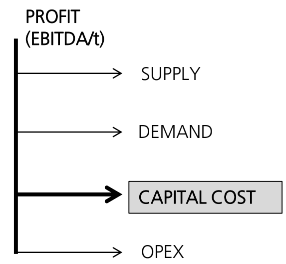
Capital cost breakdown – Land cost driving the capital cost

- The cost of setting up a greenfield cement project in India has increased substantially in the last decade as per industry estimates.
- This increase has been predominantly driven by the cost of land acquisition to set up the plant (from USD 9/t in 2009 to USD 21/t in 2015).

Exhibit 58. Land acquisition leads capital cost escalation

	2009		2015		CAGR over 2009-15
	Capital cost (USD/t)	Proportion	Capital cost (USD/t)	Proportion	
Land	9	10%	21	16%	15%
Plant and equipment	50	55%	62	48%	4%
Civil works	17	19%	25	19%	6%
Pre-operative expenses	9	10%	14	11%	8%
Others	5	6%	8	6%	6%
Total	90		130		6%

Source: Shree, JM Financial, Industry



Land acquisition – a continuous process

- The acquisition of incremental land is a continuous process for cement companies as can be seen from the exhibit below. .
- The land is acquired for to set up a greenfield plant, limestone mining and expansion of the existing facility.
- With the implementation of the Land Acquisition Act, we expect land costs to increase going forward.

Exhibit 59. Land acquisition spend across firms (INR mn)

	FY12	FY13	FY14	FY15	FY16	FY17
Ultratech	2,474	3,960	4,574	5,009	3,601	1,592
Shree	1,859	1,020	1,771	1,472	386	1,527
ACC	574	326	72	359	1,467	380
Ambuja	1,305	731	1,222	596	522	606
Dalmia	222	446	253	175	651	165
Ramco	86	231	550	348	213	434
JK Cement	264	566	377	340	351	1,062
JK Lakshmi	57	869	149	215	842	51

Source: Company, JM Financial, Industry

Land Acquisition, Rehabilitation and Resettlement Act

Compensation for the land acquisition

- Compensation for the acquired land [Max (i) and (ii) + (iii)]
  - I. Minimum land value, as specified in the Indian Stamp Act, 1899 for the registration of sale deeds in the area **(i)**
  - II. Average sale price for similar type of land situated in immediate areas adjoining the land being acquired. **(ii)**
  - III. Value of the assets on the land **(iii)**
- Rehabilitation and Resettlement entitlements (for land owners and livelihood losers)
  - I. A subsistence allowance of INR 3000/month per family for 12 months
  - II. Affected families will be entitled to INR0.5mn per family or a job for one person of the family or INR2000/month per family as annuity for 20 years
  - III. A house shall be provided if the house is lost in rural areas (as per Indira Awas Yojana in rural areas and of area no less than 50sq mts in urban areas)
  - IV. A one-time resettlement allowance of INR 50,000.

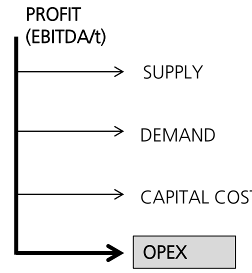
Plant/machinery, building and civil works –

- These form the major part of the total capital cost to set up a cement plant. The cost primarily depends on negotiations with vendors. As per industry estimates, currently, the cost of plant/machinery, building and civil works forms 67% of the total capital cost.

Preoperative expenses

- Preoperative expenses include interest during construction of the cement plant. This component depends on the interest rate scenario in the country. At lower interest rates, the capital is available at a cheaper rate, which may lead to an increase in capacity expansion in the industry.

Manufacturing cost management key in medium term



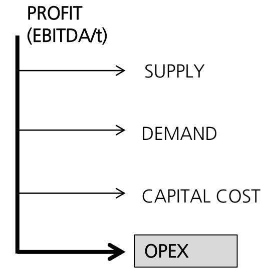
Increase in limestone costs as mines auctioned at material premium

- Players have been aggressively bidding in limestone block auctions, with winning bids at recent auctions going as high as 125% of the value of the mineral.
- Shree won a limestone mine auction in Gujarat with 301mnT reserves and Dalmia won a limestone mine in Rajasthan with 174mnT reserves; these are new markets for both players.
- The top five players in the industry have won over 50% of the reserves, while around 40% have been bagged by new entrants such as JSW, Adani and Emami.
- No incremental limestone mines are being auctioned in the Central region.

Exhibit 60. Successful limestone block auctions

Company	Location	Name of the mine	Region	Reserves (MT)	Winning bid
Ambuja Cement	Rajasthan	3D1, Harima Pithasar	North	199.2	41.6%
Ambuja Cement	Maharashtra	Nandgaon ekodi	West	42.0	125.1%
Shree Cement	Gujarat	Mudhvay Sub-block B, Lakhpat Taluka, Kachchh District, Gujarat	West	301.5	20.0%
Shree Cement	Chattisgarh	Karhi Chandi, Balodabazar - Bhatpara	East	155.0	59.0%
Dalmia Bharat	Rajasthan	Sindwari, Ramkhera, Satkhanda Block B, Chittaurgarh	North	174. 5	48.1%
Dalmia Bharat	Odisha	Kottameta Limestone mine	East	98.7	12.1%
Dalmia Bharat	Chattisgarh	Kesla II Raipur	East	217.0	96.2%
Penna Cement	AP	Gudipadu Limestone Block	South	26.7	8.1%
Century Cement	Chattisgarh	Kesla Raipur	East	67.0	10.2%
Burnpur Cement	Jharkhand	Hariharpur Block I and Harihapur Block II	East	1.1	12.0%
Sree Jayajyothi (My Home Industries)	AP	Erragudi-Hussainapuram - Yanakandla Lime Stone Block	South	9.0	10.6%
Sree Jayajyothi (My Home Industries)	AP	Nandavaram –Venkatapuram Lime Kankar Block	South	1.7	10.7%
JSW cement	Gujarat	Mudhvay Sub-block D, Lakhpat Taluka, Kachchh District, Gujarat	West	125.0	35.0%
Adani Cementation	Gujarat	Mudhvay Sub-block C, Lakhpat Taluka, Kachchh District, Gujarat	West	324.8	30.1%
Emami Cement	Rajasthan	Limestone block- 3B1-(a) n/v Deh of tehsil JayalDistrict Nagaur	North	127.0	67.9%
Emami Cement	Rajasthan	Limestone block- 3B1-(b) n/v Deh of tehsil JayalDistrict Nagaur	North	168.8	60.1%

Source: JM Financial, Industry

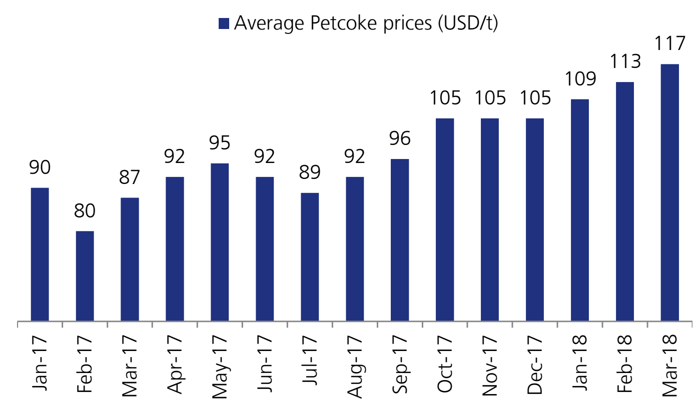


Increase in costs impacting profitability

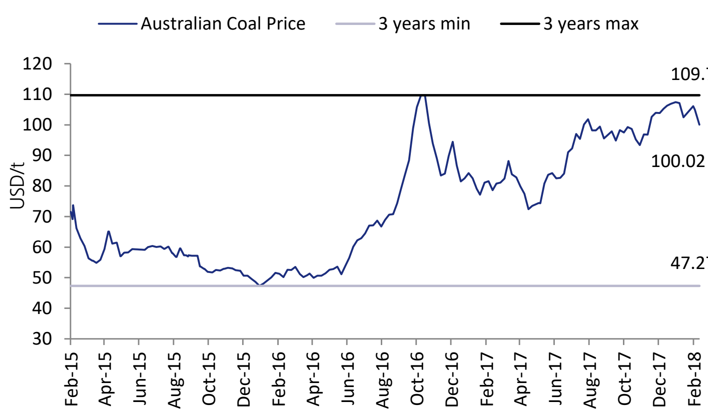
- Prices of petcoke/coal and diesel have been on an upward trajectory. This has led to the depressed margins for the cement companies.
- In a scenario of limited pricing power and unfavourable supply demand dynamics, any more cost pressures will adverse impact the profitability

Exhibit 61. Costs on an upward trajectory

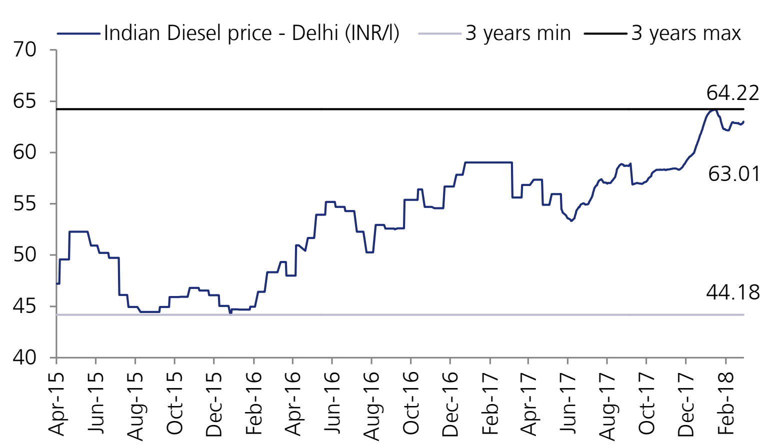
Petcoke prices rising



Increasing coal prices

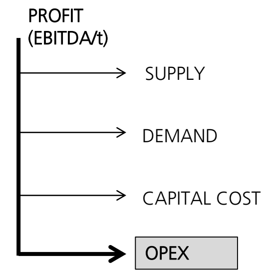


Diesel prices on a rise



Source: Company, JM Financial, Industry

Supreme Court imposes a ban on petcoke in Rajasthan; expect transitory impact



The Supreme Court (SC) of India ordered a ban on petcoke use in Rajasthan, Uttar Pradesh and Haryana from 1Nov'17. On average, 76% of cement companies' fuel requirements are met through petcoke. Additionally, Rajasthan is an important state for the cement industry on account of its large limestone reserves (12% of India's overall reserves). The blanket ban on petcoke in the region would adversely impact cement companies with exposure to the state. We expect Shree, JK Lakshmi and JK Cement to be impacted the most (negative impact of 3-5% on FY18E EBITDA). However, upon reading the judgement and the environment report, we believe the impact would be transitory in nature as cement companies could be exempted in the medium term, as recommended by the Environment Pollution (Prevention & Control) Authority (EPCA) in its report.

Please find the detailed report here

Supreme Court order on petcoke usage ban

EPCA report to Supreme Court

Subsequent clarification from EPCA and SC

The EPCA in its clarification to the states stated that the petcoke use ban is limited to the NCR region. Subsequently, Rajasthan passed an order directing industries in the districts of Alwar and Bharatpur to stop using petcoke and furnace oil. The SC - in its hearing - issued a clarification that the order on the ban on the use of petcoke is applicable to the entire states of UP, Rajasthan and Haryana and is not restricted to the NCR region.

Supreme Court clarification

EPCA clarification

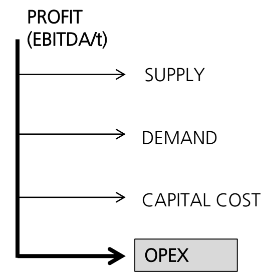
Rajasthan order

Subsequently, SC allowed the use of petcoke in cement plants

The SC - in its hearing on 13Dec'17 - allowed the use of petcoke by cement companies. This was done as in the process of calcination, limestone absorbs sulphur and hence the emissions are controlled. Ministry of Environment, Forest and Climate Change (MOEF) has also notified the emission standards for SO2 and NOx for the cement industry. However, the government hiked the customs duty on the import of petcoke from 2.5% to 10%.

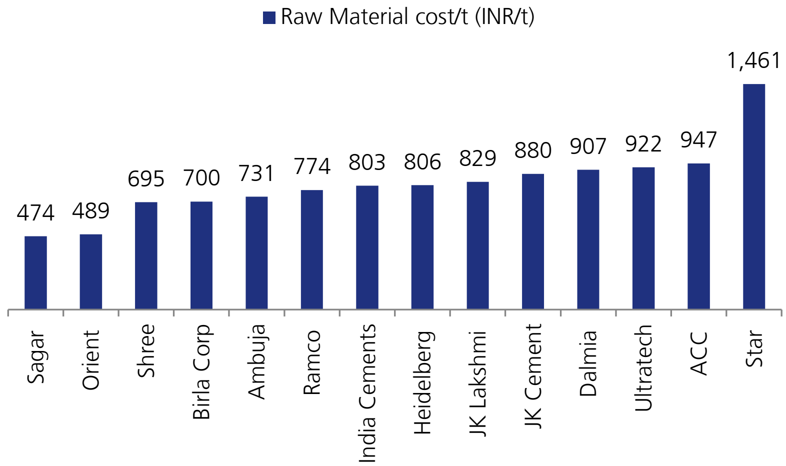
Supreme Court order allowing the use of petcoke in cement manufacturing

Cost management remains key as industry continues to face low utilisation



- **Raw material costs (wt. 24%):** Raw material for cement includes limestone, flyash, gypsum, slag, traded goods and clinker. Raw material costs could vary by the mix of cement sold. Shree and Ambuja stand out on raw material costs owing to adequate access to limestone and fly ash.

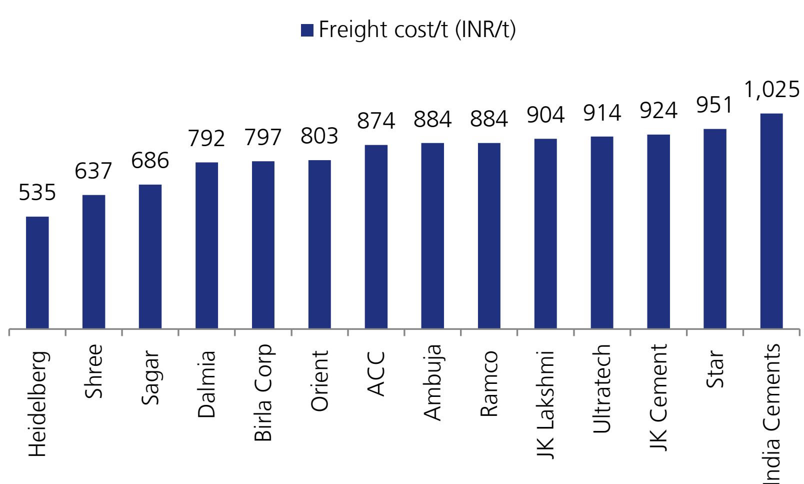
Exhibit 62. Raw material costs – Shree and Ambuja rank the highest



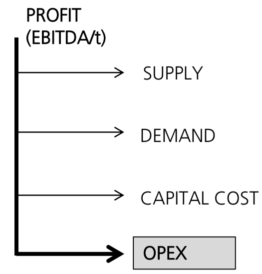
Source: Company, JM Financial, Industry

- **Freight cost (wt. 25%):** A low lead distance of travel (clinker/cement) is the key to reducing freight costs. Splitting the grinding and clinker units has also allowed companies to reduce costs significantly. Shree splits grinding units available close to its end markets and thus has one of the lowest freight costs in the industry.

Exhibit 63. Freight costs – Heidelberg and Shree have significantly lower freight cost as compared to peers

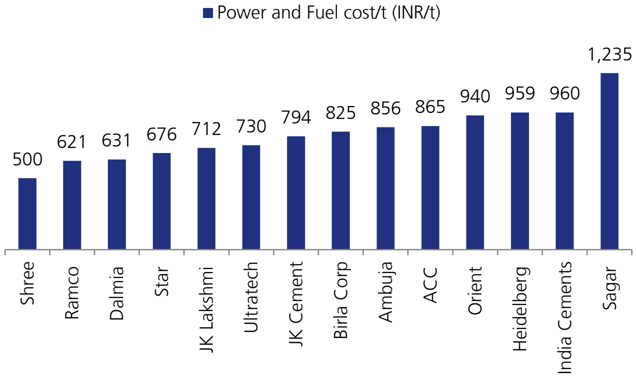


Source: Company, JM Financial, Industry



- **Power & fuel cost (wt. 22%):** Power and fuel costs for companies depend heavily on petcoke/coal commodity prices internationally. These prices are rising, and are impacting cement players' power and fuel costs. Petcoke/international coal at current prices is almost c.40%/30% higher YoY.

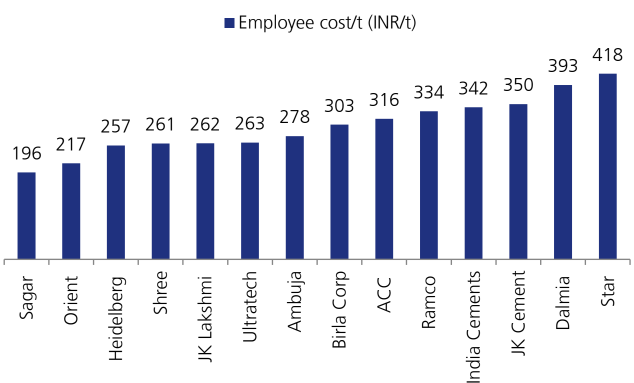
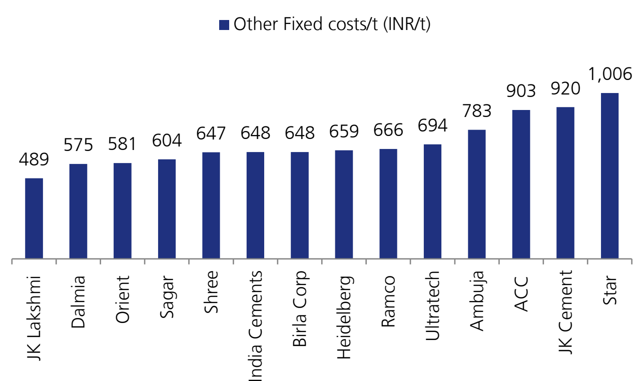
Exhibit 64. Power/fuel costs – Shree, Ramco and Dalmia stand out



Source: Company, JM Financial, Industry

- **Admin/employee cost (wt. 29%) -** Companies have limited leeway over these costs in the short term, especially when responding to demand uncertainty. A higher proportion of this component would result in higher earnings volatility.

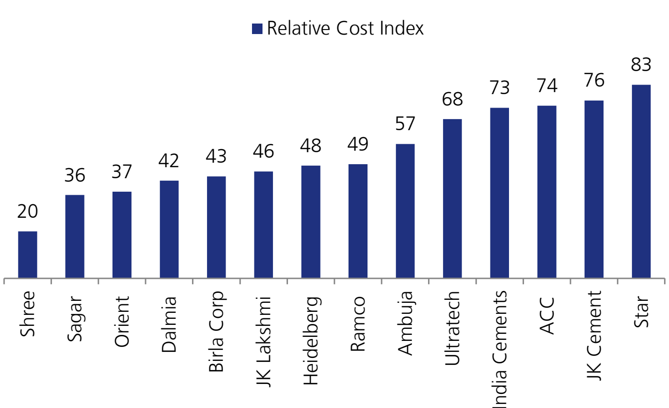
Exhibit 65. Admin/employee costs

Employee expense trends	Fixed cost (admin/repair/marketing) trends
	

Source: Company, JM Financial, Industry

- **Relative cost index:** In our coverage universe, Shree, Dalmia and JK Lakshmi stand out in terms of cost competitiveness. We expect Ultratech's cost efficiency to improve as its recent expansion/acquisition stabilises.

Exhibit 66. Relative cost index



Source: Company, JM Financial, Industry

- EBITDA/t: Dalmia and Shree - on account of lower costs - have better profitability prospects vs. peers. JK Lakshmi, even though it ranks high on the relative cost index, has subdued EBITDA/t on lower realisations. Ramco and Star cement, on account of their exposure to regions with better realisations, report high profitability on EBITDA/t.

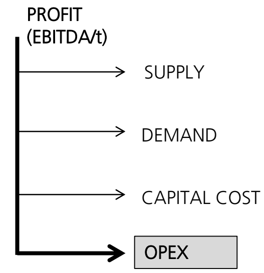
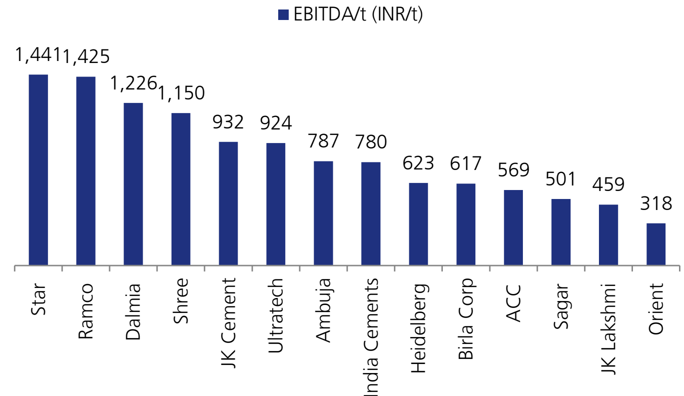
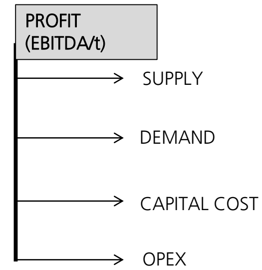


Exhibit 67. Comparative EBITDA/t for companies



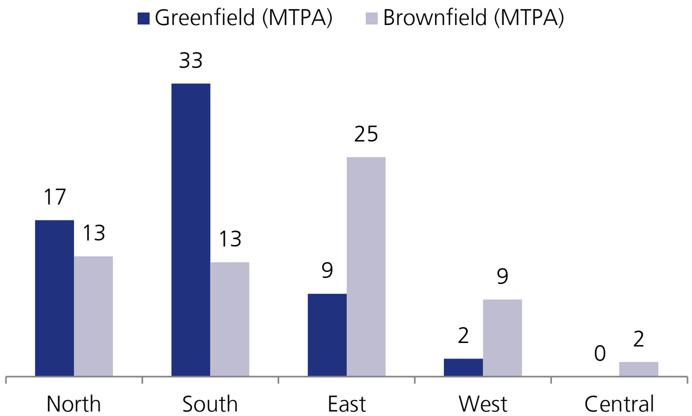
Source: Company, JM Financial, Industry



Profitability - EBITDA/t requirement

- To project sustainable profitability, we analyse the marginal capital cost and return required on it.
- Based on our supply model, we expect 120mnT of capacity addition from the top five players, with 61mnT of greenfield capacity.

Exhibit 68. Expansion split - greenfield/brownfield region wise



Source: Industry, Company, JM Financial

- We estimate region-wise profitability (EBITDA/t) based on the greenfield/brownfield expansion potential.
- We are estimating USD130/t and USD80/t capital costs to set up greenfield and brownfield integrated cement plants, respectively.
- Assuming 85% capacity utilisation, North/South India has the highest EBITDA/t requirement of INR1,450/t and INR1,550/t, respectively, on account of a higher greenfield proportion of expansion potential.
- While the Central region's EBITDA/t requirement is lowest, limited capacity addition will result in significantly higher pricing power after 2022, according to the JM Demand Model.

Exhibit 69. EBITDA/t requirement for 10% RoCE

	North	South	East	West	Central
Expansion potential split					
Greenfield	57%	72%	27%	19%	0%
Brownfield	43%	28%	73%	81%	100%
Average cost of setting up a plant	108	116	94	89	80
UND/INR	65	65	65	65	65
Capex (INR/t)	7,035	7,537	6,088	5,811	5,197
Utilisation	85%	85%	85%	85%	85%
EBITDA/t (INR/t)	1,450	1,550	1,250	1,185	1,050
Depreciation (%)	4%	4%	4%	4%	4%
Depreciation (INR)	281	301	244	232	208
EBIT (INR/t)	951	1,016	819	775	685
Tax Rate	25%	25%	25%	25%	25%
Post tax	713	762	614	581	513
ROCE	10.1%	10.1%	10.1%	10.0%	9.9%

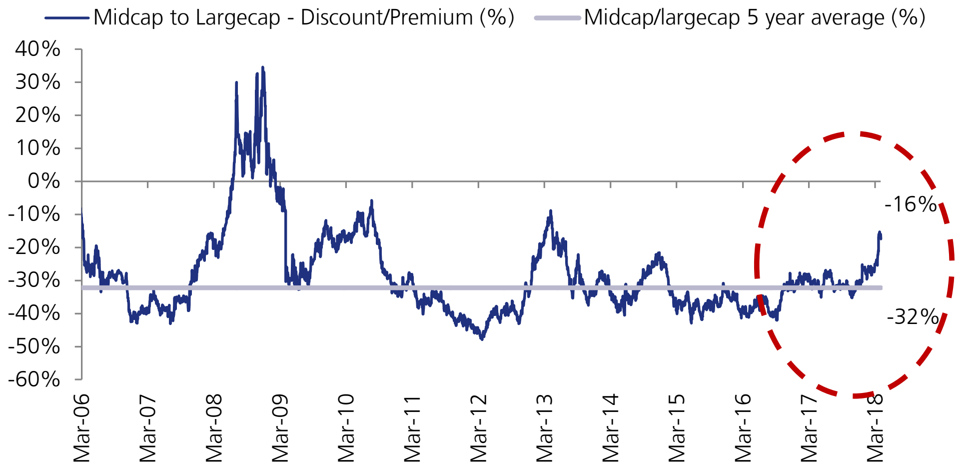
Source: JM Financial, Industry

Valuation- Introducing option value for pipeline capacity

Significant underperformance by Large caps

- Midcaps historically have traded at discount to the Large caps on EVE. The discount on an average has been at c.30% for last five years. We observe that during the upcycle/bull market the discount narrows between the Midcaps and Large caps.
- Since the last two years the valuation discount between the midcaps and large caps has been narrowing; currently at 16% vs the average discount of c.30%

Exhibit 70. Midcaps vs Large caps* (Discount/Premium)

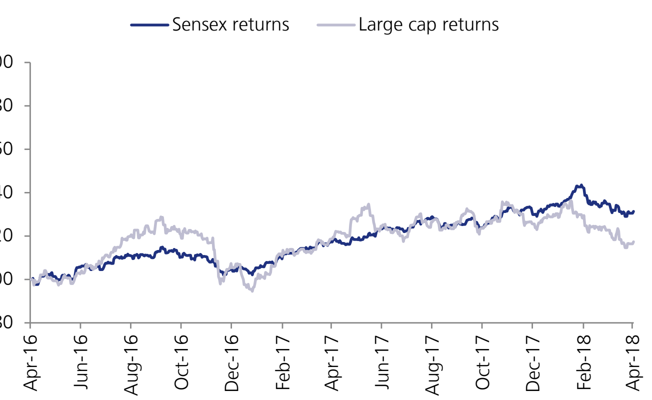


Source: Company, JM Financial, Bloomberg
* Large Caps includes Ultratech, Shree Cement, ACC and Ambuja
* Midcap companies considered are JK Lakshmi, JK Cement and Ramco cement

- Large Cap cement companies have performed poorly in comparison with the market while the mid cap players performed well with 59% two year return as against 31% return on the market.

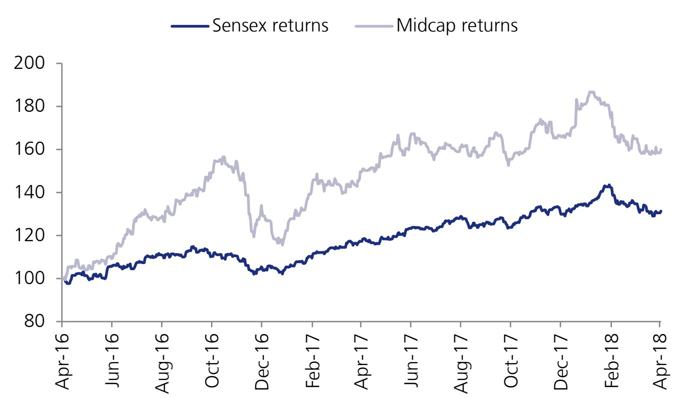
Exhibit 71. Midcaps vs. Large caps* stock performance

Large-Caps vs. Sensex



	Sensex returns	Large cap returns
1 yr	11%	-2%
2 yr	31%	17%

Midcaps vs. Sensex



	Sensex returns	Midcap returns
1 yr	11%	4%
2 yr	31%	59%

Source: JM Financial, Bloomberg
* Large Caps include Ultratech, Shree, ACC and Ambuja
* Midcaps include Ramco Cement. JK Cement, JK Lakshmi, Orient Cement and Birla Corp

Valuation Methodology – Introducing Option Value

- We believe that EBITDA/t for the companies will improve in the next two years by INR100-150/t on improving demand and efficiency driven gains.
- We use through cycle multiple for all the companies (10 year EV/EBITDA) to derive enterprise value (EV) of the existing assets. Additionally we are valuing the incremental capacity expansion potential assuming capacities to come online by FY25 and factoring in the discount on account of execution risk.
- Based on our revised valuation methodology, we prefer Ultratech/Dalmia in the large caps and JK Lakshmi cement in mid-caps

Exhibit 72. Valuation Summary

	Market Cap (INR bn)	Target Price (INR)	Expansion Potential (MTPA)	Existing/pipeline capacity (MTPA)	Expansion potential as a proportion of existing (%)	Option value of expansion potential (INR)	Option value as a % of target price	Comments
Ultratech	1,085	4,430	54.3	94.7	57%	646	15%	More than 70% of the expansion potential under EC received stage
Shree	594	16,720	26.2	42.3	62%	1,447	9%	More than 60% of greenfield capacity under approval stage
Ambuja	474	260	14.3	29.7	48%	11	4%	Major expansion potential in already saturated market and newer geography
ACC	292	1,670	9.8	33.3	29%	63	4%	80% of the greenfield expansion potential under approval stage
Dalmia	255	3,420	15.7	30.1	52%	355	10%	More than 80% of the expansion potential has received EC

Source: JM Financial, Bloomberg, Company

Exhibit 73. Valuation Table

	TP (INR)	CMP (INR)	EVE (x)			EV/t (USD)			P/E (x)		
			FY18E	FY19E	FY20E	FY18E	FY19E	FY20E	FY18E	FY19E	FY20E
Ultratech	4,430	3,950	17.3	15.6	12.0	207.9	194.9	187.2	46.1	33.1	22.6
Shree	16,720	17,058	23.0	16.8	13.4	226.6	205.7	203.9	39.8	35.2	30.5
Ambuja	260	239	16.0	13.5	12.9	161.8	159.7	159.2	37.2	30.1	28.9
ACC	1,670	1,553	13.3	11.3	11.0	120.9	116.8	116.6	30.3	25.3	24.2
Dalmia	3,420	2,859	15.3	12.8	10.8	179.6	153.9	147.7	42.6	28.6	21.5
Ramco	620	786	18.4	15.8	12.1	186.6	158.0	152.3	31.7	26.9	20.2
JK Cement	1,120	977	11.1	9.5	7.7	114.3	116.9	88.1	19.5	16.2	11.5
JK Lakshmi	510	440	14.6	11.7	8.9	82.3	74.8	71.1	48.3	27.6	16.7

	P/B (x)			RoCE (%)			RoE (%)		
	FY18E	FY19E	FY20E	FY18E	FY19E	FY20E	FY18E	FY19E	FY20E
Ultratech	4.2	3.8	3.3	8.1	9.2	12.4	9.1	11.3	14.4
Shree	6.2	5.1	4.2	8.8	10.3	12.5	8.3	10.0	12.1
Ambuja	2.4	2.3	2.3	10.2	11.1	13.4	9.9	11.1	13.6
ACC	3.1	3.0	2.9	16.8	15.9	15.3	15.6	14.5	13.9
Dalmia	4.7	4.1	3.5	10.1	11.3	14.0	13.9	14.7	16.9
Ramco	4.5	4.0	3.4	8.0	9.8	11.4	10.9	14.2	16.3
JK Cement	3.1	2.7	2.3	8.0	9.7	12.9	7.3	11.7	16.8
JK Lakshmi	3.5	3.2	2.8	11.5	11.3	12.5	16.1	16.7	19.8

Source: Company, JM Financial, Bloomberg

JM FINANCIAL

UltraTech Cement | BUY

A market leader that continues to cement its position

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UltraTech Cement (Ultratech) has an expansion planned for 71MTPA with clearances/applications in place. However, limestone and clinker constraints of c.17MTPA reduce the effective expansion potential to c.54MTPA (60% of existing capacity). Additionally, the company has 11MTPA, under construction giving significant visibility on growth. The company has clearances for 75% of its greenfield projects. A market leader with a capacity share of c.19% in the industry, Ultratech is aggressively looking to expand organic and inorganic routes. With net debt-to-EBITDA at 1.8x and a free cash flow generation of INR 82bn, the company remains well-equipped to capitalise on acquisition opportunities. We value its existing assets at 12x EVE and additionally factor in the option value of expansion potential. Our TP is INR 4,430 (Mar'19) and we maintain a BUY rating on the stock.

- **c.54MTPA of expansion potential:** Ultratech has 54.3MTPA of expansion potential with existing clearances, factoring in clinker and limestone constraints. The expansion potential is over and above the existing capacities of 11MTPA under expansion (3.5MTPA in Dhar, 3.5MTPA in Pali and 4MTPA in Bara). This gives it significant visibility for growth. However, c.65% of the expansion potential is available in South and East India, where the upcycle is expected only by FY26E. Ultratech has clearances for c.75% of its greenfield projects. We build in a marginal execution risk for the company on account of the availability of clearances for a major portion of its expansion potential.

- **Market leader; recent acquisitions to fuel growth:** Ultratech added 17.5MT capacity in FY13-17, which acounted for c.20% of total capacity addition in the country during this period. The company has also aggressively pursued inorganic expansion by buying 21.2MT of manufacturing capacity from Jaiprakash Associates (Jaiprakash). Ultratech's capacity share increased from 13.6% in FY13 to 18.9% in FY18E, making it a market leader in South, West and Central India and the second largest player in the North and East. It has also aggressively ramped up its portfolio in the non-grey cement business (white cement/RMC) and is well-poised for growth in these businesses. We expect Ultratech to focus on the ramp-up of acquired capacity (c.90% utilisation by FY20).

- **Balance sheet remains well-equipped to capitalise on acquisition opportunities:** With the acquisition of Jaiprakash's assets at INR 161.9bn, the net debt on Ultratech's balance increased to INR 136bn. However, free cash flow generation of INR 81bn over FY19-20 should help in debt repayment in the next two years.

- **Binani:** Ultratech is looking to acquire Binani Cement's assets. However, Dalmia's proposal has been recommended by the Committee of Creditors to NCLT. Ultratech has agreed to provide a Letter of Comfort to Binani Industries to pay it debt and terminate IBC proceedings for Binani. The matter is currently under the NCLT for further hearing.

- **Maintain BUY:** We value Ultratech's existing assets at 12x EVE along with INR 646/share on account of the option value of its expansion potential. We arrive at a TP of INR 4,430 and maintain a BUY rating on the stock.

Recommendation and Price Target	
Current Reco.	BUY
Previous Reco.	BUY
Current Price Target (12M)	4,430
Upside/(Downside)	12.2%
Previous Price Target	4,550
Change	-2.6%

Key Data – UTCEM IN	
Current Market Price	INR3,950
Market cap (bn)	INR1,084.6/US$16.7
Free Float	37%
Shares in issue (mn)	274.4
Diluted share (mn)	274.4
3-mon avg daily val (mn)	INR910.6/US$14.0
52-week range	4,600/3,773
Sensex/Nifty	33,627/10,332
INR/US$	65.0

Price Performance			
%	1M	6M	12M
Absolute	-4.8	0.5	-3.9
Relative*	-5.7	-4.9	-14.5

* To the BSE Sensex

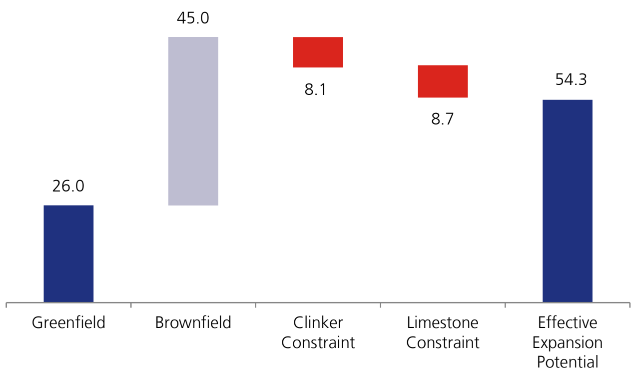
Financial Summary					(INR mn)
Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Sales	2,34,402	2,36,157	2,93,268	3,58,042	4,20,732
Sales Growth (%)	3.5	0.7	24.2	22.1	17.5
EBITDA	46,265	49,690	58,779	73,709	91,915
EBITDA Margin (%)	19.5	20.8	19.8	20.4	21.6
Adjusted Net Profit	23,701	26,414	23,506	32,322	46,531
Diluted EPS (INR)	86.4	96.3	85.7	117.8	169.6
Diluted EPS Growth (%)	17.6	11.4	-11.0	37.5	44.0
ROIC (%)	11.2	12.2	9.6	10.0	13.3
ROE (%)	11.7	11.6	9.4	11.8	15.0
P/E (x)	45.7	41.0	46.1	33.5	23.3
P/B (x)	5.0	4.5	4.2	3.8	3.3
EV/EBITDA (x)	24.7	22.6	21.1	16.4	12.7
Dividend Yield (%)	0.2	0.2	0.3	0.3	0.3

Source: Company data, JM Financial. Note: Valuations as of 06/Apr/2018

Expansion Potential:

- Ultratech has greenfield expansion potential of 26MTPA and brownfield expansion potential of 45MTPA based on the approvals obtained/applications under process for environmental clearances.
- However, clearances obtained/under process for clinker/limestone constrain the grinding expansion potential by 8.1 MTPA /8.7MTPA, reducing the effective grinding expansion potential to 54.3MTPA.
- Additionally, Ultratech is in the process of setting up 11MTPA of greenfield integrated capacity
  - Dhar, MP – 3.5MTPA greenfield integrated unit
  - Pali, Rajasthan – 3.5MTPA greenfield integrated unit
  - Bara, UP – 4MTPA under-construction unit from Jaiprakash

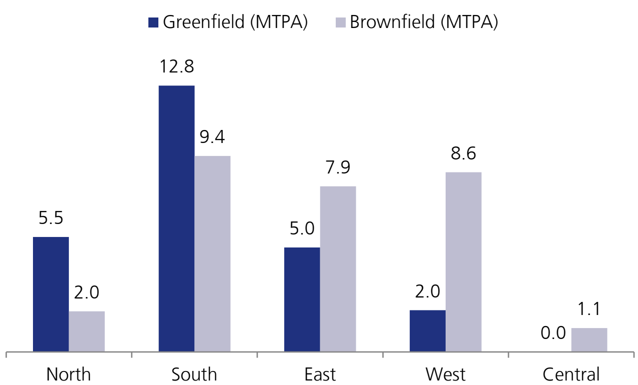
Exhibit 1. Ultratech – Effective expansion potential of c.54MTPA



Source: Company, JM Financial, Industry

- Ultratech has the highest expansion potential in the South at 22MTPA, of which 13MTPA is greenfield.

Exhibit 2. Ultratech – c.64% expansion potential in South/East



Source: JM Financial, Industry

Exhibit 3. Greenfield expansion potential – before constraints

Greenfield Potential	State	Region	Type	Grinding Potential	Clinker Potential
Integrated unit at Petnikota, Kurnool	AP	South	Integrated	6.0	4.0
Greenfield plant at Karur	TN	South	Integrated	5.5	4.5
Others				14.5	13.8
Total				**26.0**	**22.3**

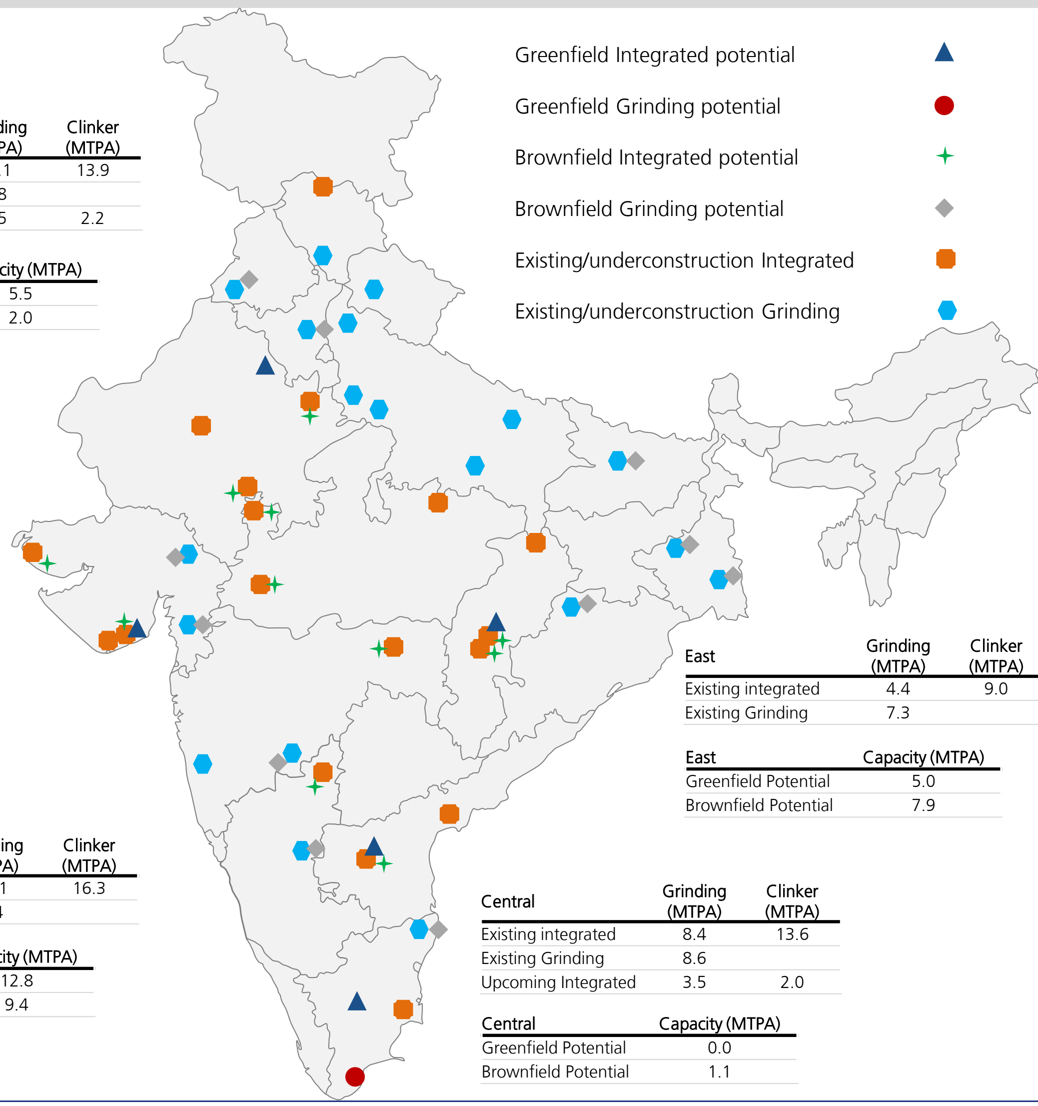
Source: Company, JM Financial, Industry

Exhibit 4. Brownfield expansion potential – before constraints

Brownfield Potential	State	Region	Type	Grinding Potential	Clinker Potential
Hirmi - HCW	Chhattisgarh	East	Integrated	4.9	4.8
Sewagram	Gujarat	West	Integrated	4.8	4.4
Others				35.3	12.5
Total				**45.0**	**21.7**

Source: Company, JM Financial, Industry

Exhibit 5. Capacity Potential



North	Grinding (MTPA)	Clinker (MTPA)
Existing integrated	11.1	13.9
Existing Grinding	7.8	
Upcoming Integrated	3.5	2.2

North	Capacity (MTPA)
Greenfield Potential	5.5
Brownfield Potential	2.0

West	Grinding (MTPA)	Clinker (MTPA)
Existing integrated	12.9	12.8
Existing Grinding	6.9	

West	Capacity (MTPA)
Greenfield Potential	2.0
Brownfield Potential	8.6

East	Grinding (MTPA)	Clinker (MTPA)
Existing integrated	4.4	9.0
Existing Grinding	7.3	

East	Capacity (MTPA)
Greenfield Potential	5.0
Brownfield Potential	7.9

South	Grinding (MTPA)	Clinker (MTPA)
Existing integrated	18.1	16.3
Existing Grinding	2.4	

South	Capacity (MTPA)
Greenfield Potential	12.8
Brownfield Potential	9.4

Central	Grinding (MTPA)	Clinker (MTPA)
Existing integrated	8.4	13.6
Existing Grinding	8.6	
Upcoming Integrated	3.5	2.0

Central	Capacity (MTPA)
Greenfield Potential	0.0
Brownfield Potential	1.1

Source: Company, JM Financial

Binani Cement Bid:

- **Ultratech's INR72.66bn Letter of Comfort to Binani Industries:** Ultratech has provided Binani Industries with a Letter of Comfort for INR 72.66bn for a 98.43% stake in Binani Cement. This is subject to the termination of IBC proceedings for Binani Cement. If the deal goes through, the acquisition will be at c.USD 140/t, adjusting for overseas assets. The Committee of Creditors has approved and recommended Dalmia's resolution proposal for Binani to NCLT. Ultratech has received CCI approval for the acquisition. The matter is currently under the NCLT for resolution.

History:

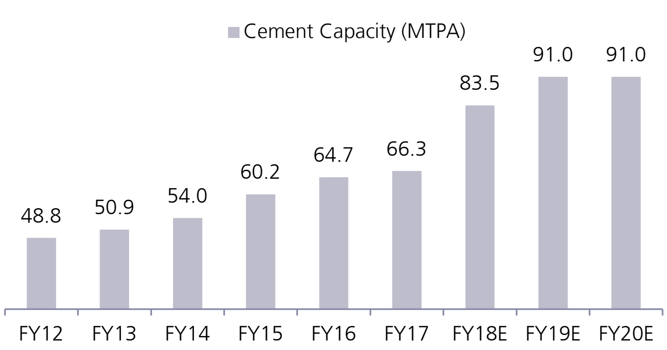
- **Dalmia is the highest bidder for Binani Cement:** Dalmia's bid has been declared the highest by the resolution professional. It made a bid of INR 63.13bn for an 80% stake in the asset, and plans to infuse an additional INR 4bn to run it. Dalmia offered c.20% stake in the asset to the lenders. Ultratech and Dalmia were the frontrunners in the auction process. As per media report, Ultratech's bid was almost at par with that of Dalmia's. However, its bid was rejected on concerns around CCI penalties.
- **Ultratech increased its bid for Binani:** After Dalmia was declared the highest bidder, Ultratech increased its bid for Binani Cement by INR 7bn to INR 72.66bn and agreed to pay the entire amount upfront.
- **Dalmia's bid approved by the Committee of Creditors and recommended to the NCLT:** Binani Cement's Committee of Creditors approved Dalmia's resolution plan, after which Ultratech appealed to the NCLT against the decision.

Capacity trends and geographical split

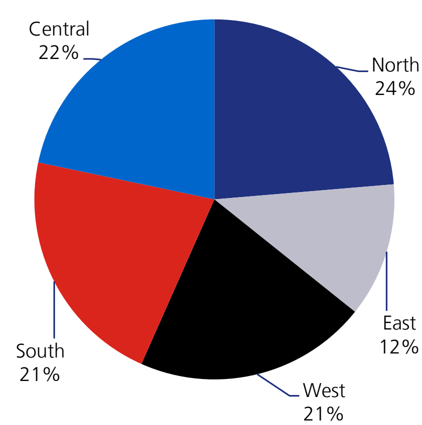
- Ultratech has successfully increased and integrated its capacity from 49MTPA in FY11 to 84MTPA in FY18E, through expansion and acquisitions. In Jun'17, the completed its acquisition of 21.2MTPA of Jaiprakash's assets (4MTPA under construction). The capacity is expected to go up to 91MTPA by FY20E and 94.5MTPA by FY21E.

Exhibit 6. Capacity growth trends and geographical split

Capacity to reach c.91MTPA by FY20E



Exposure to Central owing to the Jaipraksh Acquisition



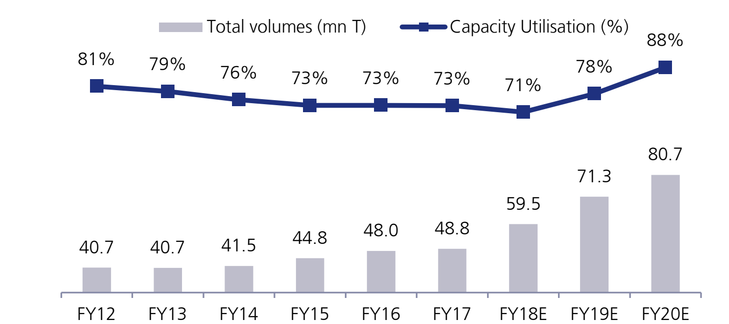
Source: Company, JM Financial

Operating parameters

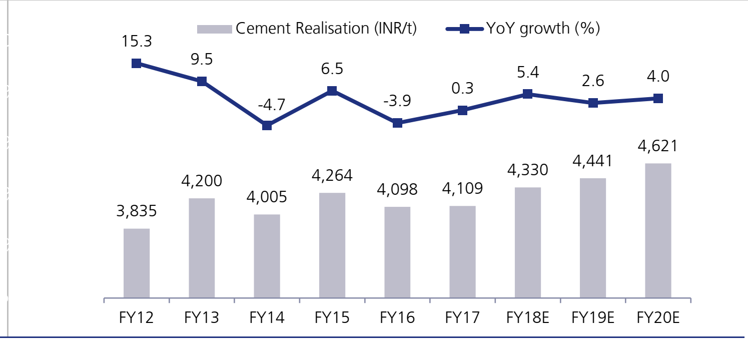
- **Volume/realisation trends –** The company has been able to ramp up production rapidly. Utilisation of the acquired units touched 60% in 3QFY18. We expect Ultratech to attain capacity utilisation of c.90% by FY20 on 17% volume CAGR over FY18-20E. We factor in realisation improvement of 3-4% in FY19E and FY20E. For Jaiprakash's assets, we factor in utilisation of 60%, 70% and 85% in FY18E, FY19E and FY20E, respectively.

Exhibit 7. Volume/realisation trends

Volumes to grow at 17% CAGR over FY18-20E



Realisation improvement of 3-4% in FY19E and FY20E

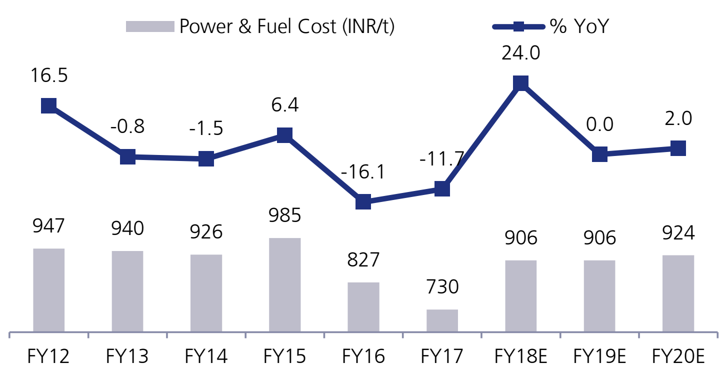


Source: Company, JM Financial

Cost trends

- **Power & fuel costs –** Petcoke/coal price escalations impacted power and fuel costs in FY18. We factor in a marginal increase in FY19-20E in power and fuel costs assuming petcoke/coal prices remain stable and efficiency parameters improve going forward.

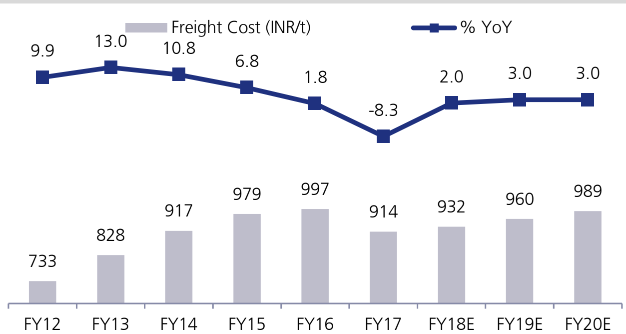
Exhibit 8. Power & fuel cost trends



Source: Company, JM Financial

- **Freight costs –** Ultratech's freight costs depend on diesel prices, railway freight rates and the lead distance. We factor in a freight cost increase of 3% in FY19E and FY20E.

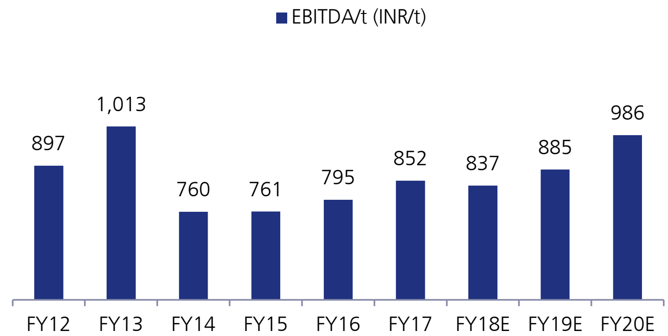
Exhibit 9. Freight cost trends



Source: Company, JM Financial

- **EBITDA/t –** We factor in EBITDA/t improvement of c.INR 50-60/t and c.INR 90-100/t in FY19E and FY20E, respectively, on profitability improvement over FY18-20E. For Jaiprakash's assets, we estimate EBITDA/t of INR 750 in FY18E and INR 800/t in FY19E; we believe it could match Ultratech's organic EBITDA/t in FY20E.

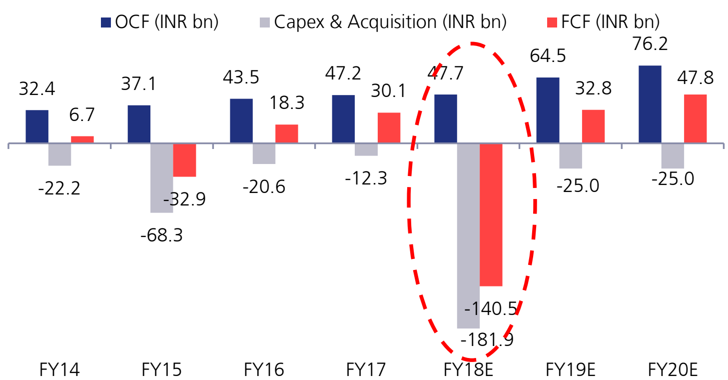
Exhibit 10. EBITDA/t trends



Source: Company, JM Financial

- **Cash flow trends –** Ultratech incurred significant capex in FY18 on account of the Jaiprakash asset acquisition. Additionally, the company is in the process of setting up integrated greenfield units of 3.5MTPA each in MP and Rajasthan apart from the under-construction grinding unit at Bara acquired from Jaiprakash. We expect free cash flow generation of INR 82bn over FY19-20E.

Exhibit 11. Cash flow trends

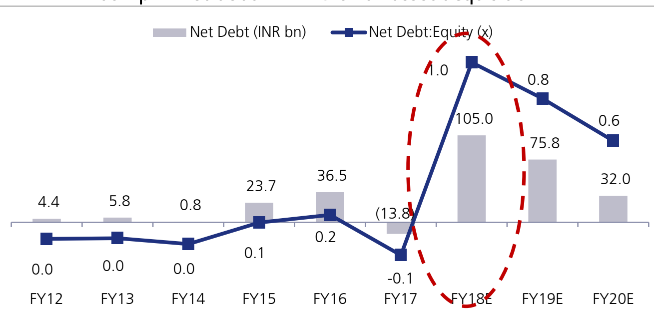


Source: Company, JM Financial

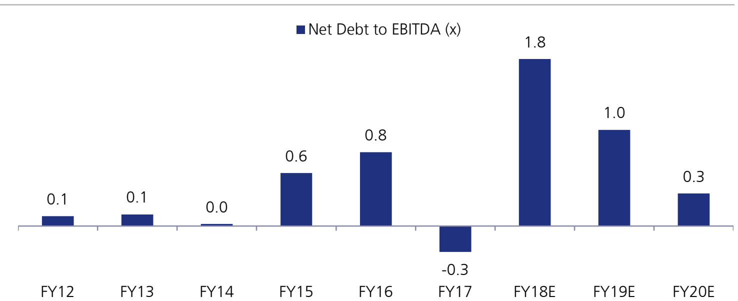
- **Debt trends –** We expect Ultratech's net debt to decline over FY18-20E on significant free cash flow generation. We expect the company to generate free cash flow of INR 81bn over FY19-20E.

Exhibit 12. Net debt to decline on free cash flow generation of c.INR 81bn over FY19E and FY20E

Jump in net debt in FY18 on JP asset acquisition



Net debt/EBITDA to decline over FY18-20E

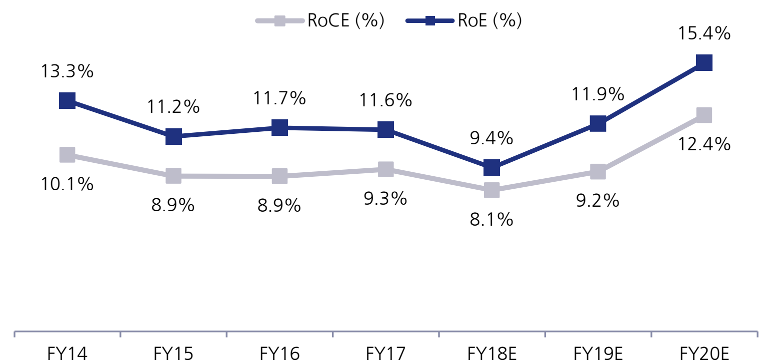


Source: Company, JM Financial

Return profile

- We expect Ultratech's RoE to improve from 9.4% in FY18E to 15.4% in FY20E and RoCE to improve from 8.1% in FY18E to 12.4% in FY20E.

Exhibit 13. Return profile



Source: Company, JM Financial

Valuation

- Ultratech is currently trading at a premium vs. its five-year average EVE multiple on growth visibility owing to the Jaiprakash acquisition. A market leader, the company has grown through inorganic and organic expansion.

Exhibit 14. Ultratech – consistently trading at premium

Source: Company, JM Financial, Bloomberg

- We value Ultratech by valuing the assets in operation and the option value of incremental expansion potential.
- Assets under operations are being valued at 12x one-year forward EVE.
- The option value of incremental expansion potential has been arrived at assuming execution of the incremental expansion by FY25 and discounted back incorporating the execution risk.
- We arrive at a target price of c.INR 4,430/share for Ultratech. This implies a 14x one-year forward EVE multiple.

Exhibit 15. Ultratech Valuation

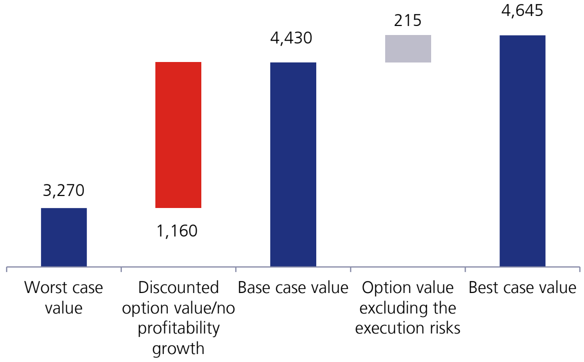
Current assets in operation	
EV including Star (INR mn)	11,13,759
Net Debt (INR mn)	75,356
Valuation (INR mn)	10,38,403
Option value of expansion potential	
Attributable value (INR mn)	1,77,244
Total (INR mn)	**12,15,647**
O/s shares	**274**
Per share value(INR)	**4,430**

Source: Company, JM Financial

Scenario analysis:

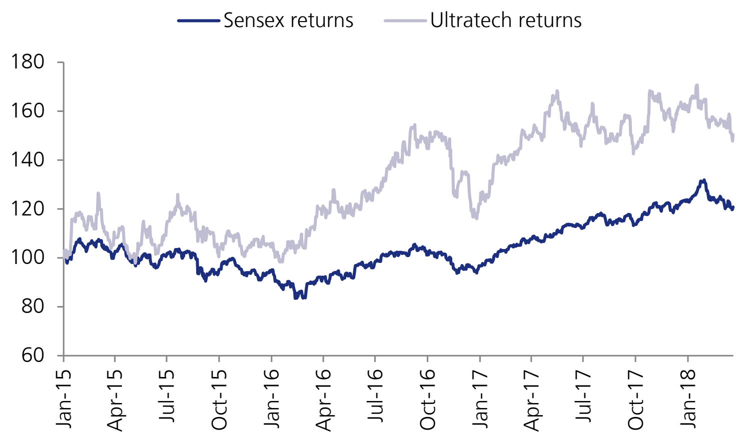
- The worst case scenario entails zero growth on profitability and no incremental value from expansion potential, while the best case factors in no execution risks.

Exhibit 16. Scenarios analysis



Source: JM Financial

Exhibit 17. Relative returns



	Sensex	Ultratech
1 yr return	13%	0%
3 yr return	18%	40%
5 yr return	77%	116%

Source: JM Financial, Bloomberg

- Key Risks: **(i)** Any action against cement pricing could have a material impact on the company's profitability. **(ii)** CCI has been keeping a close watch on the cement industry and any adverse action against cement companies will be sentimentally negative. **(iii)** New players entering the market (Vicat/Cemex) could impact utilisations. **(iv)** Any further increase in raw material costs would impact profitability.

Financial Tables (Standalone)

Income Statement					(INR mn)
Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Sales	2,34,402	2,36,157	2,93,268	3,58,042	4,20,732
Sales Growth	3.5%	0.7%	24.2%	22.1%	17.5%
Other Operating Income	2,686	2,757	2,933	3,580	4,207
Total Revenue	**2,37,088**	**2,38,914**	**2,96,201**	**3,61,622**	**4,24,939**
Cost of Goods Sold/Op. Exp	35,331	35,410	41,536	50,865	59,164
Personnel Cost	13,431	14,134	17,598	21,551	25,067
Other Expenses	1,42,061	1,39,681	1,78,288	2,15,497	2,48,793
EBITDA	**46,265**	**49,690**	**58,779**	**73,709**	**91,915**
EBITDA Margin	19.5%	20.8%	19.8%	20.4%	21.6%
EBITDA Growth	10.3%	7.4%	18.3%	25.4%	24.7%
Depn. & Amort.	12,970	12,679	17,732	20,188	21,088
EBIT	33,295	37,011	41,047	53,521	70,826
Other Income	4,807	6,600	5,772	5,299	5,862
Finance Cost	5,117	5,714	12,044	11,976	9,252
PBT before Excep. & Forex	32,985	37,896	34,775	46,844	67,437
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	32,985	37,896	34,775	46,844	67,437
Taxes	9,284	11,482	11,268	14,522	20,905
Extraordinary Inc./Loss(-)	0	-137	0	0	0
Assoc. Profit/Min. Int.(-)	0	0	0	0	0
Reported Net Profit	23,701	26,277	23,506	32,322	46,531
Adjusted Net Profit	**23,701**	**26,414**	**23,506**	**32,322**	**46,531**
Net Margin	10.0%	11.1%	7.9%	8.9%	11.0%
Diluted Share Cap. (mn)	274.4	274.4	274.4	274.4	274.4
Diluted EPS (INR)	**86.4**	**96.3**	**85.7**	**117.8**	**169.6**
Diluted EPS Growth	17.6%	11.4%	-11.0%	37.5%	44.0%
Total Dividend + Tax	2,934	3,110	3,306	3,637	3,967
Dividend Per Share (INR)	9.1	9.7	10.0	11.0	12.0

Source: Company, JM Financial

Balance Sheet					(INR mn)
Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Shareholders' Fund	2,16,318	2,39,410	2,59,609	2,88,295	3,30,859
Share Capital	2,744	2,745	2,744	2,744	2,744
Reserves & Surplus	2,13,574	2,36,665	2,56,866	2,85,551	3,28,115
Preference Share Capital	0	0	0	0	0
Minority Interest	0	0	0	0	0
Total Loans	82,499	62,404	1,62,404	1,32,404	92,404
Def. Tax Liab. / Assets (-)	24,320	27,736	27,736	27,736	27,736
Total - Equity & Liab.	**3,23,137**	**3,29,550**	**4,49,749**	**4,48,435**	**4,50,999**
Net Fixed Assets	2,41,031	2,41,101	4,05,259	4,10,071	4,13,983
Gross Fixed Assets	2,39,116	2,56,741	4,38,631	4,58,631	4,78,631
Intangible Assets	0	0	0	0	0
Less: Depn. & Amort.	12,241	24,424	42,156	62,344	83,432
Capital WIP	14,156	8,784	8,784	13,784	18,784
Investments	57,932	74,087	49,087	49,087	49,087
Current Assets	83,943	77,623	68,001	76,960	90,211
Inventories	22,776	22,250	28,122	34,333	40,344
Sundry Debtors	14,149	12,762	16,069	19,619	23,054
Cash & Bank Balances	22,352	22,177	3,376	2,574	6,380
Loans & Advances	1,849	1,795	1,795	1,795	1,795
Other Current Assets	22,817	18,639	18,639	18,639	18,639
Current Liab. & Prov.	59,769	63,261	72,597	87,681	1,02,280
Current Liabilities	0	0	0	0	0
Provisions & Others	59,769	63,261	72,597	87,681	1,02,280
Net Current Assets	24,174	14,362	-4,596	-10,722	-12,069
Total – Assets	**3,23,137**	**3,29,550**	**4,49,750**	**4,48,436**	**4,51,000**

Source: Company, JM Financial

Cash Flow Statement					(INR mn)
Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Profit before Tax	32,985	37,760	34,775	46,844	67,437
Depn. & Amort.	12,970	12,679	17,732	20,188	21,088
Net Interest Exp. / Inc. (-)	5,117	5,714	12,044	11,976	9,252
Inc (-) / Dec in WCap.	5,211	4,878	157	5,324	5,153
Others	-4,385	-6,511	-5,772	-5,299	-5,862
Taxes Paid	-8,355	-7,307	-11,268	-14,522	-20,905
Operating Cash Flow	**43,543**	**47,213**	**47,668**	**64,512**	**76,162**
Capex	-20,595	-12,274	-1,81,890	-25,000	-25,000
Free Cash Flow	22,949	34,939	-1,34,222	39,512	51,162
Inc (-) / Dec in Investments	0	0	0	0	0
Others	-16,972	-11,361	30,772	5,299	5,862
Investing Cash Flow	**-37,567**	**-23,635**	**-1,51,118**	**-19,701**	**-19,138**
Inc / Dec (-) in Capital	27	66	0	0	0
Dividend + Tax thereon	-2,926	-3,085	-3,306	-3,637	-3,967
Inc / Dec (-) in Loans	2,463	-15,337	1,00,000	-30,000	-40,000
Others	-5,388	-5,470	-12,044	-11,976	-9,252
Financing Cash Flow	**-5,824**	**-23,826**	**84,650**	**-45,613**	**-53,219**
Inc / Dec (-) in Cash	**152**	**-249**	**-18,801**	**-802**	**3,805**
Opening Cash Balance	2,006	22,352	22,177	3,376	2,574
Closing Cash Balance	2,158	22,103	3,376	2,574	6,380

Source: Company, JM Financial

Dupont Analysis					
Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Margin	10.0%	11.1%	7.9%	8.9%	11.0%
Asset Turnover (x)	0.8	0.7	0.8	0.8	0.9
Leverage Factor (x)	1.5	1.4	1.6	1.6	1.5
RoE	11.7%	11.6%	9.4%	11.8%	15.0%

Key Ratios					
Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
BV/Share (INR)	788.3	872.4	945.9	1,050.4	1,205.5
ROIC	11.2%	12.2%	9.6%	10.0%	13.3%
ROE	11.7%	11.6%	9.4%	11.8%	15.0%
Net Debt/Equity (x)	0.3	0.2	0.6	0.5	0.3
P/E (x)	45.7	41.0	46.1	33.5	23.3
P/B (x)	5.0	4.5	4.2	3.8	3.3
EV/EBITDA (x)	24.7	22.6	21.1	16.4	12.7
EV/Sales (x)	4.8	4.7	4.2	3.4	2.7
Debtor days	22	19	20	20	20
Inventory days	35	34	35	35	35
Creditor days	0	0	0	0	0

Source: Company, JM Financial

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JM FINANCIAL

Shree Cement | HOLD

Robust expansion pipeline

Shree Cement (SRCM) has expansion potential of 26MTPA (61% of announced capacity) in addition to announced expansion of 7.4MTPA in the pipeline. SRCM's expansion history provides comfort on its execution capability. It has forayed into the Middle East and Africa (MEA) market through the acquisition of Union Cement Company (UCC) at an EV/t of USD 75/t. SRCM's cost leadership gives it a competitive advantage. An improving demand scenario and robust capacity pipeline improves its earnings outlook. We value the existing operations at 12x EVE. Additionally, we incorporate INR 1,447/share on its expansion potential. While we believe SRCM is well-placed to benefit from a demand revival in the sector, we note that current valuations adequately factor in the positives. We maintain HOLD with a revised TP of INR 16,720.

- **26MTPA of expansion potential:** SRCM has 26MTPA of incremental expansion potential over and above the expansion currently underway. However, the clinker and limestone bottleneck reduces its effective expansion potential from 60.8MTPA to 26.2MTPA. Greenfield expansion potential is available in the North (7MTPA) and South (3.6MTPA), while key brownfield potential is available in the East (10.6MTPA) and North (4.6MTPA). While c.60% of greenfield potential is still in the process of approval, the company's expansion history provides comfort on its execution capability.

- **Organic expansion to fuel growth:** SRCM has multiplied its capacity by 2.5x - from 13.5 MTPA in FY13 to c.35 MTPA in FY18 - adding 3.6MTPA in Sriganganagar in Rajasthan and 2MTPA (brownfield expansion) in Aurangabad (guided for 10MTPA resulting grinding capacity at Aurangabad). The company has 7.4MTPA of incremental capacity in the pipeline, strengthening its position in the North, East and South. SRCM's market share in the North is expected to remain at c.22.0% over the next few years. The company has healthy operating cash flow, which is expected to support its capacity expansion programmes. It is expected to generate cumulative operating cash flows of c.INR 76bn over FY19-20E

- **MEA foray:** SRCM's board has approved the acquisition of UAE-based cement player UCC, which has 4MTPA cement capacity. SRCM is paying USD 305.24mn (INR 19.4bn) for the acquisition, which implies an EV/T of USD 75/t and EV/EBITDA (TTM) of 5.2x. We are valuing the acquisition at the cost.

- **Cost leadership to provide competitive advantage:** SRCM is a cost leader based on the JM Cost Index. The company ranks highest in most of the cost efficiency parameters. Its operating efficiency gives it a significant advantage over peers in an environment of subdued demand, muted prices, lower utilisations and rising costs.

- **Maintain HOLD:** We value SRCM's existing assets at 12x EVE. Additionally, we factor in a value of INR 1,447/share on its expansion potential. We have factored in execution risks as some projects are still in the process of approval. We arrive at a TP of INR 16,720/share. We maintain HOLD as we await a better entry opportunity.

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Recommendation and Price Target	
Current Reco.	HOLD
Previous Reco.	HOLD
Current Price Target (12M)	16,720
Upside/(Downside)	-2.0%
Previous Price Target	16,000
Change	4.5%

Key Data – SRCM IN	
Current Market Price	INR17,058
Market cap (bn)	INR594.3/US$9.1
Free Float	49%
Shares in issue (mn)	34.8
Diluted share (mn)	34.8
3-mon avg daily val (mn)	INR442.0/US$6.8
52-week range	20,560/15,600
Sensex/Nifty	33,627/10,332
INR/US$	65.0

Price Performance

%	1M	6M	12M
Absolute	2.5	-9.1	-3.1
Relative*	1.5	-14.0	-13.7

* To the BSE Sensex

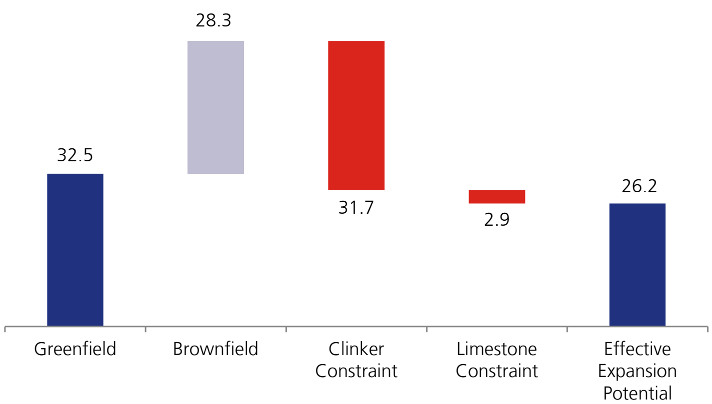
Financial Summary					(INR mn)
Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Sales	55,136	84,291	98,992	1,31,560	1,56,082
Sales Growth (%)	-14.4	52.9	17.4	32.9	18.6
EBITDA	14,069	23,672	25,146	33,661	41,839
EBITDA Margin (%)	25.5	28.1	25.3	25.5	26.7
Adjusted Net Profit	11,431	13,391	14,945	16,878	19,470
Diluted EPS (INR)	328.1	384.4	429.0	484.5	558.8
Diluted EPS Growth (%)	147.5	17.1	11.6	12.9	15.4
ROIC (%)	12.7	21.3	19.4	18.9	18.9
ROE (%)	18.9	18.4	17.3	15.9	15.1
P/E (x)	52.0	44.4	39.8	35.2	30.5
P/B (x)	8.7	7.7	6.2	5.1	4.2
EV/EBITDA (x)	40.8	24.0	23.1	16.8	13.4
Dividend Yield (%)	0.1	0.8	0.1	0.1	0.1

Source: Company data, JM Financial. Note: Valuations as of 06/Apr/2018

Expansion Potential at 26mnT:

- SRCM has greenfield expansion potential of 32.5MTPA and brownfield expansion potential of 28.3MTPA based on the approvals obtained/applications under process for environmental clearances.
- However, clearances obtained/under process for clinker/limestone constrain the grinding expansion potential by 31.7/2.9MTPA, reducing the effective grinding expansion potential to 26.2MTPA.
- Additionally, SRCM is setting up 7.4MTPA capacity at
  - Bihar – 0.9MTPA of debottlenecking at Bihar's existing grinding unit
  - Bihar – 3.5MTPA brownfield grinding unit
  - Karnataka – 3MTPA greenfield integrated unit

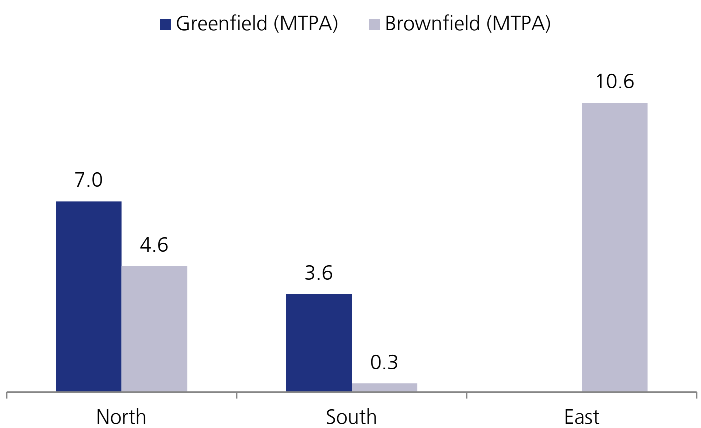
Exhibit 1. Shree – Effective expansion potential of c.26MTPA



Source: Company, JM Financial, Industry

- SRCM has major greenfield expansion potential in the North and South along with major brownfield expansion potential in the North and East.

Exhibit 2. Region-wise greenfield/brownfield potential



Source: Company, JM Financial, Industry

Exhibit 3. Greenfield expansion potential – before constraints

Greenfield Potential	State	Region	Type	Grinding Potential	Clinker Potential
Pedagarlapad, Guntur	AP	South	Integrated	4.0	2.4
Joga Jaisalmer	Rajasthan	North	Integrated	3.0	5.2
Others				25.5	8.0
Total				**32.5**	**15.6**

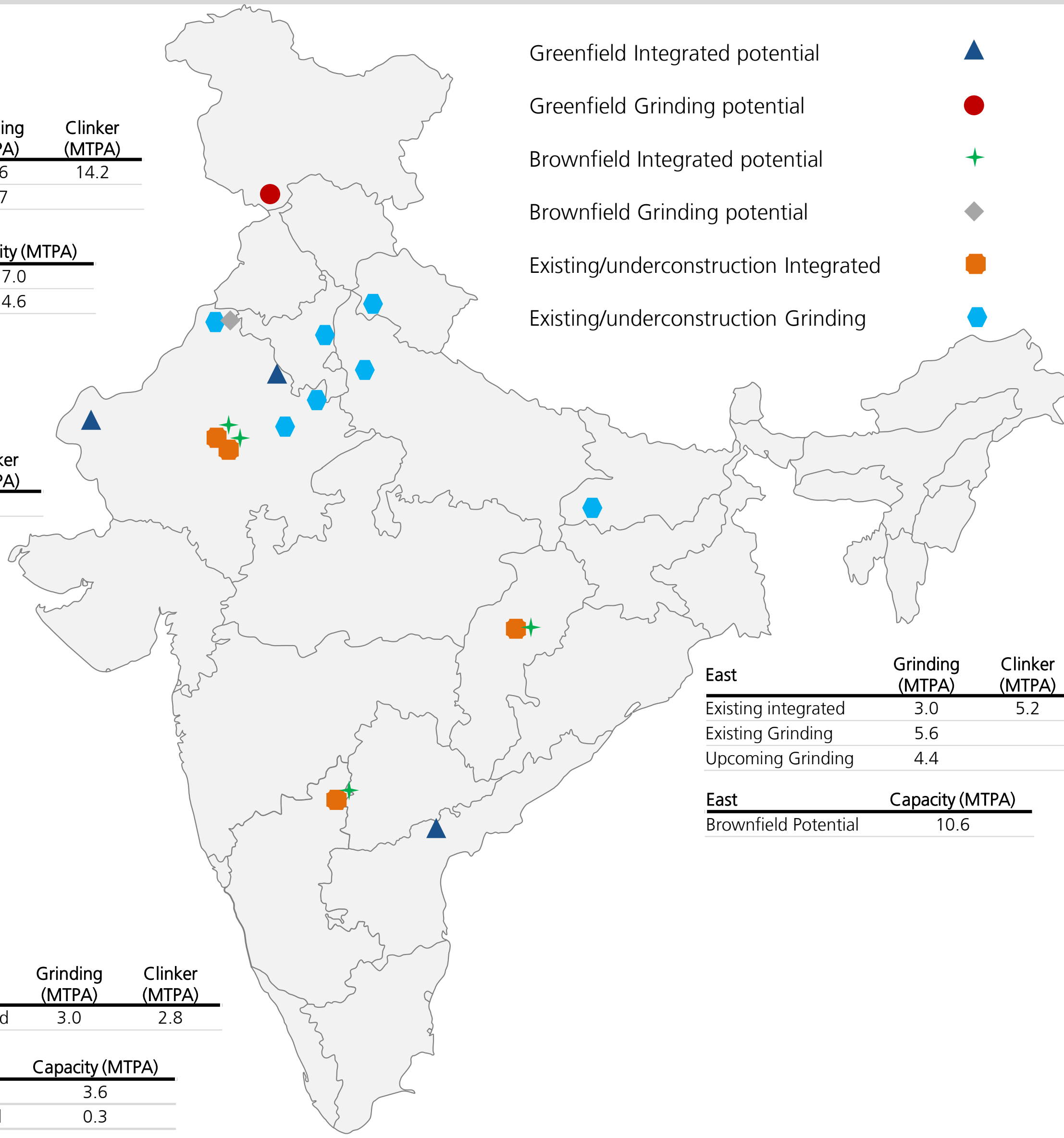
Source: Company, JM Financial, Industry

Exhibit 4. Brownfield expansion potential – before constraints

Brownfield Potential	State	Region	Type	Grinding Potential	Clinker Potential
Baloda Bazar	Chattisgarh	East	Integrated	13.5	8.3
Ras	Rajasthan	North	Integrated	6.2	3.8
Others				8.6	3.5
Total				**28.3**	**15.6**

Source: Company, JM Financial, Industry

Exhibit 5. Expansion Potential



North	Grinding (MTPA)	Clinker (MTPA)
Existing integrated	10.6	14.2
Existing Grinding	13.7	

North	Capacity (MTPA)
Greenfield Potential	7.0
Brownfield Potential	4.6

Central	Grinding (MTPA)	Clinker (MTPA)
Existing Grinding	2.0	

East	Grinding (MTPA)	Clinker (MTPA)
Existing integrated	3.0	5.2
Existing Grinding	5.6	
Upcoming Grinding	4.4	

East	Capacity (MTPA)
Brownfield Potential	10.6

South	Grinding (MTPA)	Clinker (MTPA)
Upcoming integrated	3.0	2.8

South	Capacity (MTPA)
Greenfield Potential	3.6
Brownfield Potential	0.3

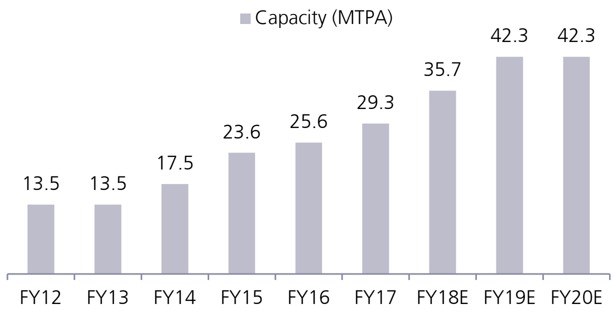
Source: Company, JM Financial

Capacity to reach 42MTPA by FY20

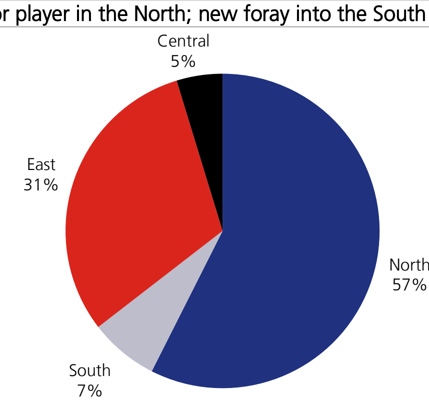
- SRCM is in the process of setting up grinding units at Aurangabad in Bihar. It has guided for 10MTPA consolidated capacity at Aurangabad after the expansion. The company is setting up an integrated capacity at Gulbarga in Karnataka (3MTPA).
- The company has recently commissioned brownfield expansion at Sriganganagar (3.6MTPA) and Aurangabad (2MTPA).

Exhibit 6. Capacity growth trends and geographical split

Capacity to reach 42.3MTPA by FY20



A major player in the North; new foray into the South and East



Source: Company, JM Financial

SRCM forays into the MEA market; Deal marginally value accretive

SRCM's board has approved the acquisition of UAE-based cement player UCC, which has 4MTPA cement capacity (3.3MTPA of clinker). SRCM is paying USD 305.24mn (INR 19.4bn) and the acquisition implies an EV/T of USD 75/t and EV/EBITDA (TTM) of 5.2x. This is the company's first foray into the international cement market and the completion of the acquisition should take around 9 months. Based on our estimates, the company is paying c.40% premium to the traded multiple. While the company's return profile is muted (c.7% RoE/RoCE on acquisition cost), attributing USD 140-150/ton will provide a 2-3% upside to the current valuation. The acquisition is likely to add 6% to SRCM's FY19 EBITDA on a consolidated basis (assuming no growth in EBITDA from UCC).

- UCC brief: UCC is a cement company based out of the UAE and has been operating for the past 4 decades. It has 4MTPA (3.3MTPA clinker) capacity and manufactures a variety of cement such as OPC, sulphate resisting cement and oil well cement. The plant is located in close to Ras Al-Khaimah's Saqr port, which helps it serve export markets such as the Middle East and Africa. UCC is a public company listed on the Abu Dhabi Exchange (ADX). It has one subsidiary - UCC Norcem - in which it owns a 60% stake; UCC Norcem is engaged in the marketing of oil well cement. For the 9 months ended Sep'17, the company's revenue was USD 120mn, of which 51% came from exports. Its EBITDA during the same period was USD 26mn.
- Acquisition details: SRCM is valuing 100% of UCC at USD 305mn. The acquisition process will take 9 months as the sellers will first begin converting UCC into a Private Joint Stock Company and delist it from the ADX. This will require approvals from the government as well as shareholders. However, no regulatory approvals are required from India. Management states that 92.8% of beneficial shareholders have agreed to the acquisition. In a comparable deal, Ultratech in 2010 had acquired Star Cement at a valuation of c.USD 120/t.

Exhibit 7. Acquisition details

Capacity	4.00	
Clinker	3.30	
Consideration paid		
EV	305.24	
EV/t	76.31	
EV the company was trading at	AED	USD
Market Cap AED	950.60	256.66
AED to USD	0.27	0.27
Net Debt	-281.05	-75.88
EV	669.55	180.78
NWC as on Sep'17	AED	USD
Trade and other receivables	144.90	39.12
Inventories	141.68	38.25
Due from Related parties	41.77	11.28
Trade and other payables	122.22	33.00
NWC	206.13	55.65
Premium to traded valuations	38%	

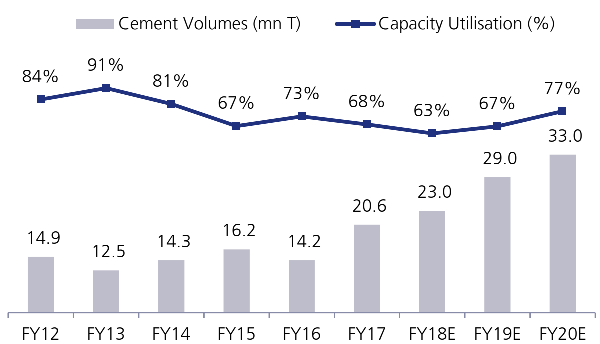
Source: Company, JM Financial

Operating parameters

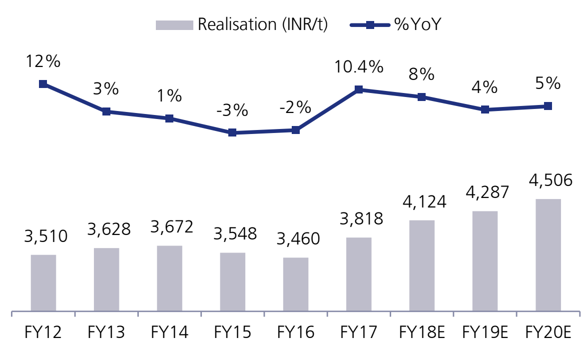
- **Volume realisation trends –** We expect cement volumes to post a 20% CAGR over FY18-FY20E. Additionally, utilisation levels should improve from 63% in FY18E to c.77% in FY20E. We factor in realisation improvement of 4-5% in FY19E and FY20E.

Exhibit 8. Volume/realisation trends

Volumes to post a 20% CAGR over FY18-20E



Realisation improvement of 4-5% in FY19E and FY20E

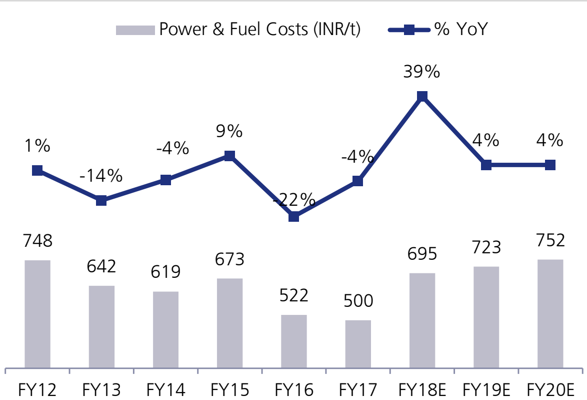


Source: Company, JM Financial

Cost trends

- **Power & fuel costs –** The rise in petcoke/coal prices led to the increase in SRCM's power and fuel costs. We factor in a cost increase of 4% in FY19E and FY20E.

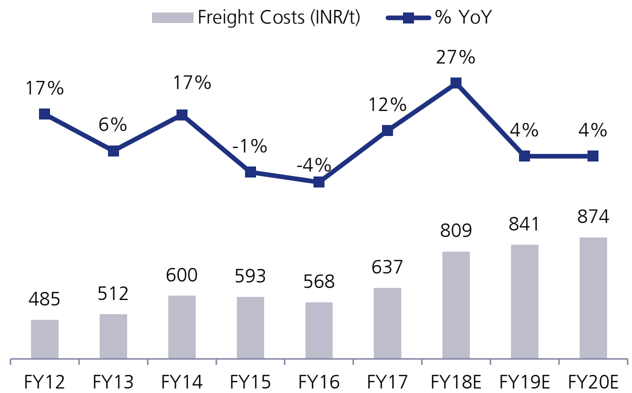
Exhibit 9. Power & Fuel cost trends



Source: Company, JM Financial

- **Freight costs –** The significant rise in freight costs in FY18 was primarily led by an increase in diesel prices, which boosted road freight. We factor in a freight increase of 4% in FY19E and FY20E.

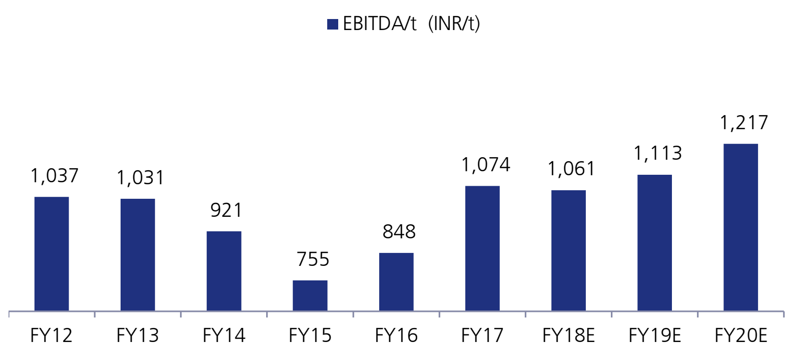
Exhibit 10. Freight cost trends



Source: Company, JM Financial

- **EBITDA/t –** We factor in EBITDA/t improvement of c.INR 50-60/t and c.INR 90-100/t in FY19E and FY20E, respectively, on profitability improvement over FY18-20E.

Exhibit 11. EBITDA/t trends

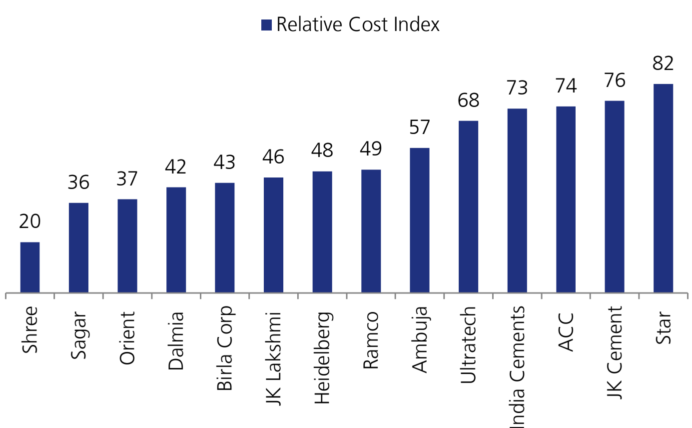


Source: Company, JM Financial

Cost efficiency:

- SRCM ranks the highest in JM's Relative Cost Index. The cost efficiency gives it an edge over other peers, especially in an uncertain demand scenario.

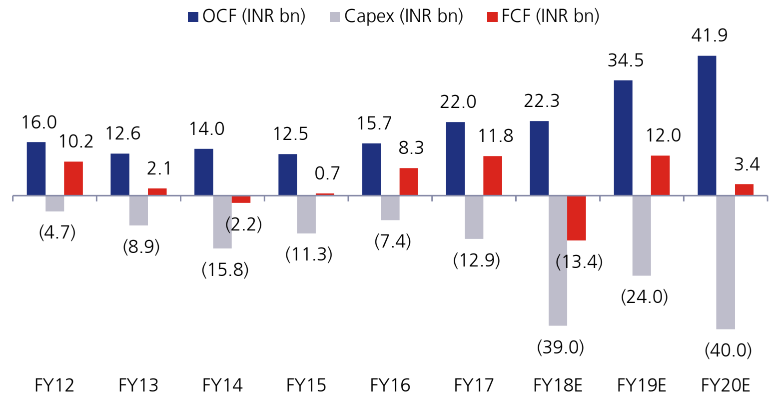
Exhibit 12. JM Relative Cost Index



Source: Company, JM Financial

- **Cash flow trends –** We expect SRCM's operating cash flows to improve over FY18-20E on a capacity ramp-up and profitability improvement. We expect the company to generate operating cash flow of INR 76bn over FY19-20E.

Exhibit 13. Cash flow trends



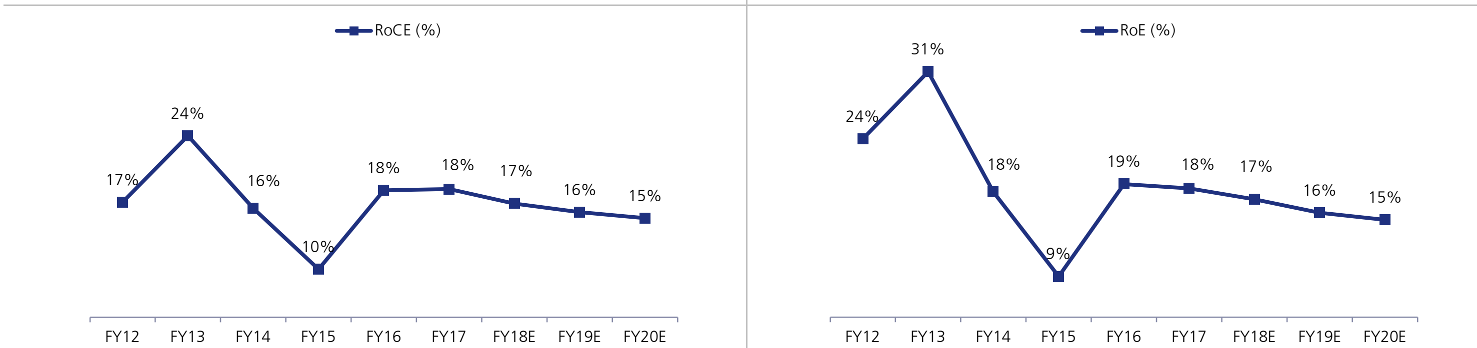
Source: Company, JM Financial

Return profile

- We expect SRCM's RoCE and RoE to remain range-bound on capital expenditure and a gradual ramp-up in capacity utilisation.

Exhibit 14. Return profile

RoCE profile | RoE profile

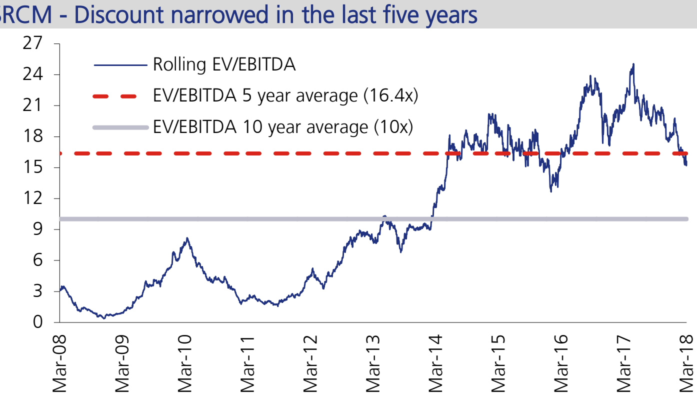


Source: Company, JM Financial

Valuation:

- SRCM – over the last five years – has appreciated on account of its growth and its status as the lowest-cost producer. The company is currently trading near its five-year average EVE multiple.

Exhibit 15. SRCM - Discount narrowed in the last five years



Source: Company, JM Financial, Industry

- We value SRCM by valuing the assets in operation and the option value of incremental expansion potential.
- Assets under operations are being valued at 12x one-year forward EVE.
- Option value of incremental expansion potential has been arrived at assuming execution of the incremental expansion by FY25 and discounted back.
- We arrive at a target price of c.INR 16,720/share for SRCM. This implies a 13.8x one-year forward EVE multiple for the company.

Exhibit 16. SRCM Valuation (INR mn)

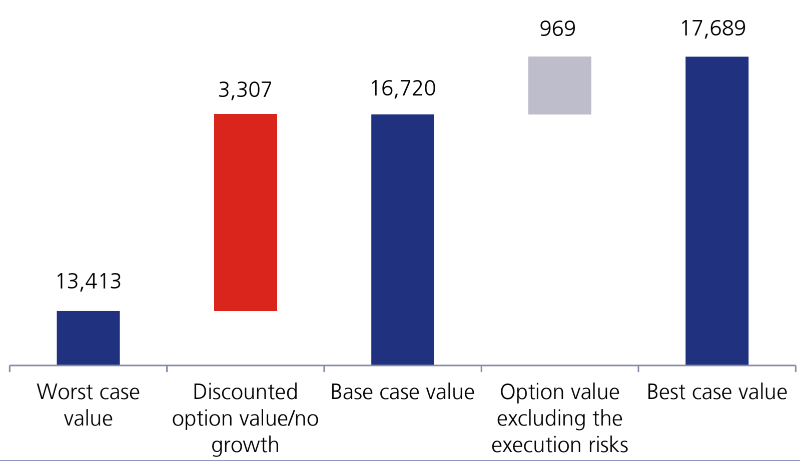
Current assets in operation	
Standalone EV	5,02,067
Net Debt	-7,536
Valuation	5,09,603
Option value of expansion potential	
Valuation	50,415
Union Cement Company	22,643
Total	**5,82,661**
O/s shares	**35**
Per share value	**16,720**

Source: Company, JM Financial

Scenario analysis:

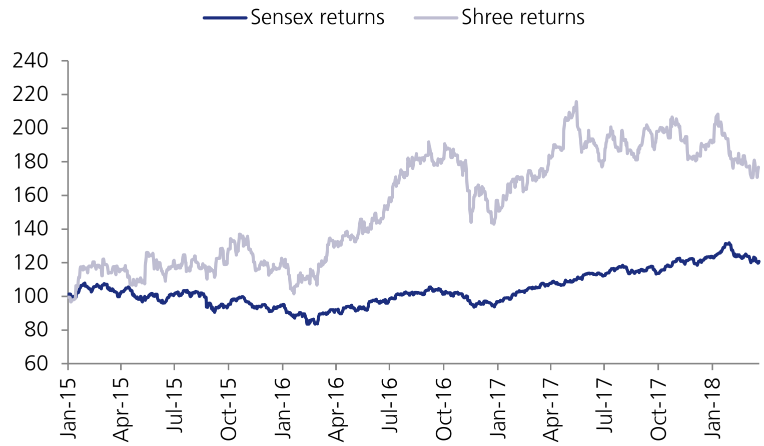
- The worst case scenario entails zero growth on profitability (EBITDA/t) and no incremental value from expansion potential, while the best case factors in no execution risks.

Exhibit 17. Scenario analysis



Source: JM Financial

Exhibit 18. Relative returns



	Sensex	Shree
1 yr return	13%	2%
3 yr return	18%	50%
5 yr return	77%	313%

Source: JM Financial, Bloomberg

- Key Risks: (i) SRCM's ability to replicate its operational parameters in MEA market will be a challenge. (ii) The company has also entered the South India market and its ability to garner market share in the already saturated market will be a challenge. (iii) Any action against cement pricing could have a material impact on the company's profitability. (iv) The CCI has been keeping a close watch on the cement industry and any adverse action against cement companies will be sentimentally negative. (v) New players entering the market (Vicat/Cemex) could impact utilisations. (vi) Any further increase in raw material costs could impact profitability.

Financial Tables (Standalone)

Income Statement (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Sales	55,136	84,291	98,992	1,31,560	1,56,082
Sales Growth	-14.4%	52.9%	17.4%	32.9%	18.6%
Other Operating Income	0	1	322	428	507
Total Revenue	**55,136**	**84,292**	**99,314**	**1,31,988**	**1,56,589**
Cost of Goods Sold/Op. Exp	4,526	6,272	7,905	10,256	12,020
Personnel Cost	3,699	5,372	5,944	7,711	9,037
Other Expenses	32,843	48,976	60,319	80,360	93,694
EBITDA	**14,069**	**23,672**	**25,146**	**33,661**	**41,839**
EBITDA Margin	25.5%	28.1%	25.3%	25.5%	26.7%
EBITDA Growth	4.7%	68.3%	6.2%	33.9%	24.3%
Depn. & Amort.	8,276	12,147	9,282	15,271	20,469
EBIT	5,793	11,525	15,863	18,390	21,370
Other Income	6,727	5,077	4,500	3,026	3,124
Finance Cost	758	1,294	1,203	1,559	1,588
PBT before Excep. & Forex	11,763	15,308	19,161	19,857	22,906
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	11,763	15,308	19,161	19,857	22,906
Taxes	331	1,917	4,215	2,979	3,436
Extraordinary Inc./Loss(-)	0	0	2,500	2,500	2,500
Assoc. Profit/Min. Int.(-)	0	0	0	0	0
Reported Net Profit	11,431	13,391	17,445	19,378	21,970
Adjusted Net Profit	**11,431**	**13,391**	**14,945**	**16,878**	**19,470**
Net Margin	20.7%	15.9%	15.0%	12.8%	12.4%
Diluted Share Cap. (mn)	34.8	34.8	34.8	34.8	34.8
Diluted EPS (INR)	**328.1**	**384.4**	**429.0**	**484.5**	**558.8**
Diluted EPS Growth	147.5%	17.1%	11.6%	12.9%	15.4%
Total Dividend + Tax	1,006	5,871	1,007	1,007	1,007
Dividend Per Share (INR)	24.0	140.0	24.0	24.0	24.0

Source: Company, JM Financial

Balance Sheet (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Shareholders' Fund	68,455	76,981	95,919	1,16,790	1,40,253
Share Capital	348	348	348	348	348
Reserves & Surplus	68,107	76,633	95,571	1,16,442	1,39,905
Preference Share Capital	0	0	0	0	0
Minority Interest	0	0	0	0	0
Total Loans	8,805	12,925	12,925	12,925	11,925
Def. Tax Liab. / Assets (-)	-3,718	-5,077	-5,077	-5,077	-5,077
Total - Equity & Liab.	**73,543**	**84,829**	**1,03,767**	**1,24,638**	**1,47,101**
Net Fixed Assets	33,147	33,096	62,813	71,543	91,073
Gross Fixed Assets	38,720	46,354	51,354	1,01,354	1,51,354
Intangible Assets	0	0	0	0	0
Less: Depn. & Amort.	8,218	20,363	29,645	44,916	65,385
Capital WIP	2,645	7,104	41,104	15,104	5,104
Investments	30,305	40,426	25,426	42,069	42,069
Current Assets	27,464	33,063	37,306	39,944	48,250
Inventories	8,152	13,145	12,205	16,220	19,243
Sundry Debtors	3,286	3,351	5,442	7,232	8,580
Cash & Bank Balances	830	1,110	4,203	1,035	4,971
Loans & Advances	449	516	516	516	516
Other Current Assets	14,746	14,940	14,940	14,940	14,940
Current Liab. & Prov.	17,372	21,754	21,778	28,916	34,291
Current Liabilities	6,159	5,874	5,874	5,874	5,874
Provisions & Others	11,213	15,881	15,905	23,043	28,417
Net Current Assets	10,091	11,308	15,528	11,027	13,959
Total – Assets	**73,543**	**84,830**	**1,03,767**	**1,24,638**	**1,47,101**

Source: Company, JM Financial

Cash Flow Statement (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Profit before Tax	11,763	15,308	19,161	19,857	22,906
Depn. & Amort.	8,276	12,147	9,282	15,271	20,469
Net Interest Exp. / Inc. (-)	758	1,294	1,203	1,559	1,588
Inc (-) / Dec in WCap.	-1,748	-509	-1,126	1,333	1,003
Others	-1,956	-3,333	-2,000	-526	-624
Taxes Paid	-1,431	-2,891	-4,215	-2,979	-3,436
Operating Cash Flow	**15,662**	**22,017**	**22,304**	**34,515**	**41,906**
Capex	-7,371	-12,947	-39,000	-24,000	-40,000
Free Cash Flow	8,291	9,070	-16,696	10,515	1,906
Inc (-) / Dec in Investments	-7,048	-11,867	15,000	-16,643	0
Others	1,773	4,334	4,500	3,026	3,124
Investing Cash Flow	**-12,646**	**-20,479**	**-19,500**	**-37,617**	**-36,876**
Inc / Dec (-) in Capital	0	0	0	0	0
Dividend + Tax thereon	-1,592	-4,846	-1,007	-1,007	-1,007
Inc / Dec (-) in Loans	-224	4,455	0	0	-1,000
Others	-892	-1,278	2,175	941	912
Financing Cash Flow	**-2,708**	**-1,669**	**1,167**	**-67**	**-1,095**
Inc / Dec (-) in Cash	**308**	**-132**	**3,971**	**-3,168**	**3,935**
Opening Cash Balance	3,075	830	1,110	4,203	1,035
Closing Cash Balance	3,383	699	5,081	1,035	4,971

Source: Company, JM Financial

Dupont Analysis

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Margin	20.7%	15.9%	15.0%	12.8%	12.4%
Asset Turnover (x)	0.7	1.0	1.0	1.1	1.1
Leverage Factor (x)	1.2	1.2	1.2	1.1	1.1
RoE	18.9%	18.4%	17.3%	15.9%	15.1%

Key Ratios

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
BV/Share (INR)	1,964.8	2,209.6	2,753.1	3,352.2	4,025.6
ROIC	12.7%	21.3%	19.4%	18.9%	18.9%
ROE	18.9%	18.4%	17.3%	15.9%	15.1%
Net Debt/Equity (x)	-0.3	-0.4	-0.2	-0.3	-0.3
P/E (x)	52.0	44.4	39.8	35.2	30.5
P/B (x)	8.7	7.7	6.2	5.1	4.2
EV/EBITDA (x)	40.8	24.0	23.1	16.8	13.4
EV/Sales (x)	10.4	6.7	5.8	4.3	3.6
Debtor days	22	15	20	20	20
Inventory days	54	57	45	45	45
Creditor days	0	0	0	0	0

Source: Company, JM Financial

JM FINANCIAL

Ambuja Cement | HOLD

Correction offers value; limited triggers in the medium term

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Ambuja Cement (Ambuja) has lost market share to peers despite its strong balance sheet and presence across regions. Analysing growth triggers, the company has an expansion pipeline of 18.3MTPA, with feasible potential after constraints at 14.3MTPA (48% of existing). Key constraints on the stock's performance are operating capacity being constrained by the availability of clinker (80% utilisation currently) and under-baked capacity expansion (1.7MTPA clinker in Marwar Mundwa). We expect the master supply agreement (MSA) with ACC to improve logistic rationalisation to some extent. Management estimates a 3-5% benefit from the MSA, translating to savings of INR 1.4bn on a consolidated basis. We value the current assets at 12x EVE and factor in INR 10/share for expansion potential to arrive at a TP of INR 260 (Mar'19). We maintain HOLD as we await a better risk/reward in the stock. An increase in royalty and limited visibility on expansion plans are key downside risks.

- **Cumulative greenfield/brownfield expansion potential of c.14.3MTPA:** With the existing clearances, Ambuja has 18.3MTPA of expansion potential. However, this is constrained by clinker availability, which drops it down to 14.3MTPA. Of the 14.3MTPA, 5 is greenfield potential concentrated in South India and 9.4 is brownfield expansion potential available in the North and East. Major brownfield potential of 4.5MTPA is available in the under-construction plant at Marwar Mundwa. Historically, the company has been slow in executing expansion projects; it has added 2.3MTPA (c.8%) capacity since CY11. We are factoring in the execution risk on the expansion potential. Additionally, greenfield expansion in the South entails the risk of a newer market and saturation in the Southern/Eastern markets (to enter the upcycle only by 2025-26E).

- **ACC-Ambuja merger deferred; MSA with ACC:** The Boards of ACC and Ambuja announced that the companies will not pursue the proposed merger for the time being owing to some constraints on its implementation. The Boards have however approved the mutual sale and purchase of materials/services through an MSA. Earlier in 2013, the companies had indicated savings of INR 3.6bn-4.2bn on account of logistic optimisation. However, management has revised the savings estimate downward on MSA to 3-5% of PBT for both companies. This translates to a saving of INR 1.4bn on a consolidated basis.

- **Clinker - a bottleneck for growth:** Ambuja has added only 1.7MT capacity in the past three years and has limited capacity addition plans over the medium term, including a 1.7MTPA clinker greenfield unit at Marwar Mundwa (nascent stage). The company has been losing its capacity market share (declined from 9% in FY13 to 6.2% in FY18). With Ambuja's current clinker utilisation at 80%, the company's growth is contingent upon further expansion. With demand expected to rise materially in the near term, we see limited benefits accruing to Ambuja, as its clinker capacity is fully utilised over the next two years.

- **Maintain HOLD:** We value Ambuja's assets under operation at 12x EVE. We are incorporating a INR 10/share of value from its expansion potential, factoring in the execution risks. We arrive at a TP of INR 260/share and maintain HOLD.

Recommendation and Price Target	
Current Reco.	HOLD
Previous Reco.	HOLD
Current Price Target (12M)	260
Upside/(Downside)	8.9%
Previous Price Target	260
Change	0.0%

Key Data – ACEM IN	
Current Market Price	INR239
Market cap (bn)	INR473.9/US$7.3
Free Float	29%
Shares in issue (mn)	1,985.7
Diluted share (mn)	1,985.7
3-mon avg daily val (mn)	INR786.3/US$12.1
52-week range	292/223
Sensex/Nifty	33,627/10,332
INR/US$	65.0

Price Performance			
%	1M	6M	12M
Absolute	-0.8	-14.4	-1.9
Relative*	-1.7	-19.0	-12.7

* To the BSE Sensex

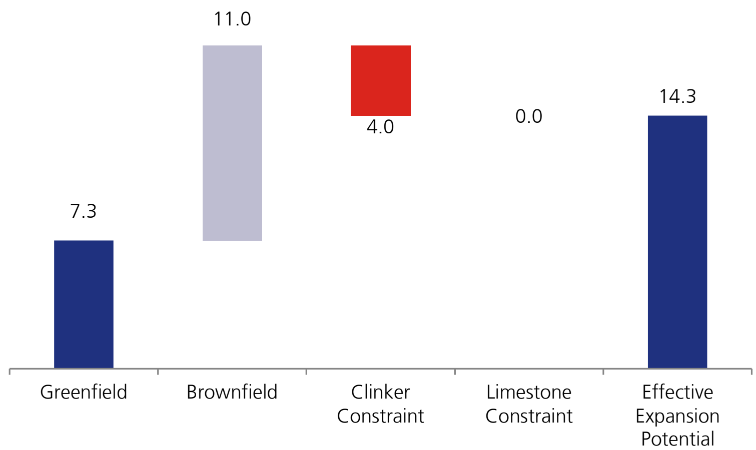
Financial Summary					(INR mn)
Y/E March	CY15A	CY16A	CY17E	CY18E	CY19E
Net Sales	93,683	2,00,938	2,35,984	2,62,440	2,88,244
Sales Growth	-5.5%	114.5%	17.4%	11.2%	9.8%
EBITDA	15,315	31,812	38,576	42,911	51,428
EBITDA Margin	16.2%	15.8%	16.3%	16.1%	17.6%
Adjusted Net Profit	8,631	11,437	15,164	17,621	22,425
Diluted EPS (INR)	5.6	5.8	7.6	8.9	11.3
Diluted EPS Growth	-34.7%	3.6%	32.6%	16.2%	27.3%
ROIC	12.4%	10.0%	9.6%	11.6%	15.1%
ROE	8.5%	7.6%	7.5%	8.4%	10.3%
P/E (x)	43.0	41.5	31.3	26.9	21.2
P/B (x)	3.6	2.4	2.3	2.2	2.1
EV/EBITDA (x)	27.8	14.9	11.9	10.4	8.4
Dividend Yield	1.2%	1.2%	1.2%	2.1%	2.1%

Source: Company data, JM Financial. Note: Valuations as of 06/Apr/2018

14.3 MTPA of Expansion Potential:

- Ambuja has greenfield expansion potential of 7.3MTPA and brownfield expansion potential of 11MTPA based on its applications under process for environmental clearances.
- However, clearances for clinker are a constraint for realising its grinding expansion potential by 4MTPA, reducing the effective grinding expansion potential to 14.3MTPA.

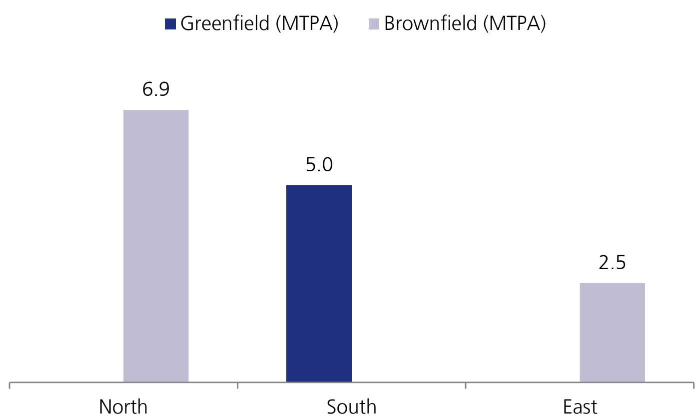
Exhibit 1. Ambuja Cement - Effective expansion potential of c.16MTPA



Source: Company, JM Financial, Industry

- Greenfield potential is available in South India, while brownfield potential is available in the North and East.

Exhibit 2. Region-wise greenfield/brownfield expansion potential



Source: Company, JM Financial, Industry

Exhibit 3. Greenfield capacity expansion potential

Greenfield expansion	State	Region	Type	Grinding Potential	Clinker Potential
ACL plant in Budavada, Gogulapadu, Guntur	AP	South	Integrated	5.8	3.3
Bhanpura, Mandsaur	MP	Central	Grinding	1.5	
Total				7.3	3.3

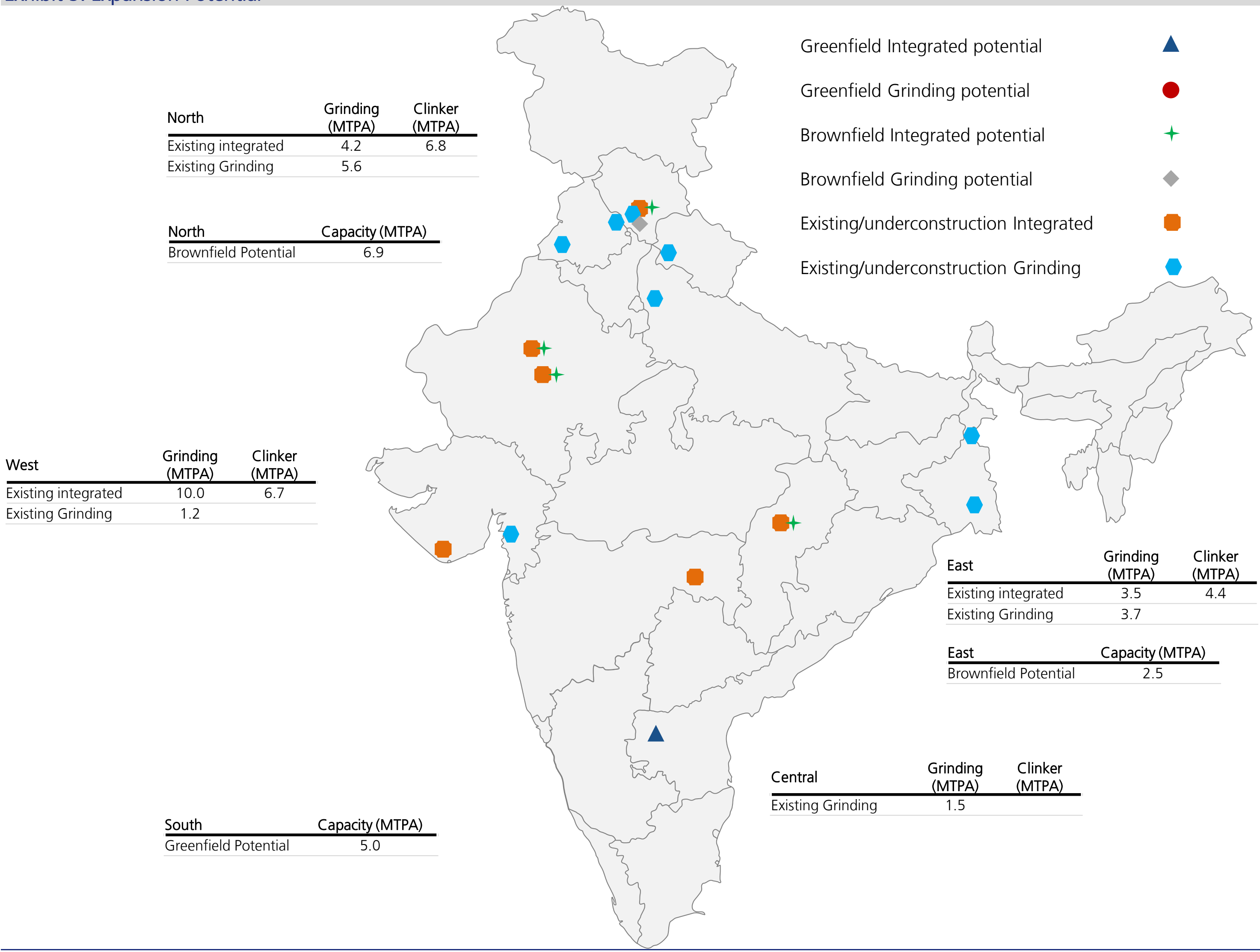
Source: Company, JM Financial, Industry

Exhibit 4. Brownfield capacity expansion potential

Brownfield expansion	State	Region	Type	Grinding potential	Clinker potential
Marawar Mundhwa	Rajasthan	North	Integrated	4.5	1.3
Darlaghat - Rauri - Solan	HP	North	Integrated	1.5	0.4
Others				5.0	0.9
Total				**11.0**	**2.6**

Source: Company, JM Financial, Industry

Exhibit 5. Expansion Potential

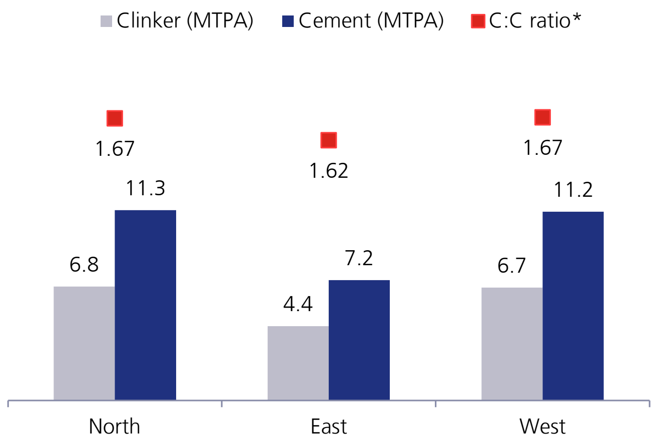


Source: Company, JM Financial

Clinker capacity – a constraint in the medium term

Ambuja's existing clinker capacity is the constraint in the medium term for the realisation of 100% capacity utilisation. The company is in the process of setting up a clinker unit in Rajasthan, but this is still at the nacsent stage and is expected to come online by FY20.

Exhibit 6. Clinker capacity - bottleneck for growth



Source: Company, JM Financial * Cement to Clinker ratio at 100% utilisation

ACC-Ambuja Merger deferred

The Boards of ACC and Ambuja announced that the companies will not pursue the proposed merger for the time being owing to some constraints on its implementation. However, the Boards have approved mutual sale and purchase of materials/services through an MSA. We believe the deferral of merger will limit the expected synergies, thus impacting the multiple re-rating, especially for ACC (FY19 EV/EBITDA - 13x for Ambuja vs. 11x for ACC).

Master Supply Agreement:

- ACC and Ambuja have sought the approval of shareholders for the MSA. It delineates the supply arrangement of cement, clinker, raw materials (fuels, fly ash, slag, gypsum, etc.), spare parts and grinding services between the companies. The contract or arrangement will be carried out through a purchase order based on the requirements as determined by the respective managements. Specifics of the pricing for each material and service are provided in exhibit below. The MSA would be entered into on a "non-exclusive" basis by the two companies. The cement purchased will be sold under its own brand by the purchasing company. The agreement will be valid until the mutual consent of both companies. The LafargeHolcim Group and Ambuja (in case of ACC) will abstain from voting.
- In 2013, the Managements had indicated a benefit of INR 3.6bn-4.2bn to accrue to the combined entity on account of logistic cost optimisation, c.85% of the estimated cost saving from cement swaps between the units of the two companies.
- Management has since reduced the savings estimates from their swap arrangement to 3-5% of the FY17 Profit Before Tax.

Exhibit 7. Master Supply Agreement between ACC and Ambuja

Sr no	Material/Service	Pricing formula and delivery point
1	Cement	Manufacturing company's average net selling price minus 5% discount, applied (a) In case of "FOR Delivery", the average net selling price applicable for such FOR Deliveries in the relevant district (b) In case of "Ex-Delivery", the average net selling price applicable for such Ex-Deliveries in the relevant district Delivery Point: (a) "FOR Delivery"; delivered at buying company's dealer, retailer, or consumer site (b) "Ex-Delivery"; delivered at the manufacturing plant or dispatching railway yard
2	Toll Grinding	For each tonne, (A) + (B), (A) = conversion charged determined at 8% of the Gross Fixed Assets Block (B) = Manufacturing plant's variable cost per tonne of the previous quarter, plus 10% mark-up Delivery Point at the manufacturing plant
3	Clinker	Price will be one of the following: (a) Ex works market price or (b) Ex works market price determined by the independent agency appointed by the Board of Directors of both parties (c) Manufacturing plant's clinker variable costs for the previous quarter, plus 35% mark up Delivery point at the manufacturing plant
4	Raw materials for clinker - Fuel on "as needed basis"	Price will be one of the following: (a) Replacement cost thereof at manufacturing company's location based on market price (b) Manufacturing company's landed cost thereof plus carrying cost of 8% per annum for the holding period Delivery point at the manufacturing company's location
5	Raw materials for Cement-fly ash, slag, gypsum etc. on "as needed basis"	
6	Spare parts on "as needed basis"	

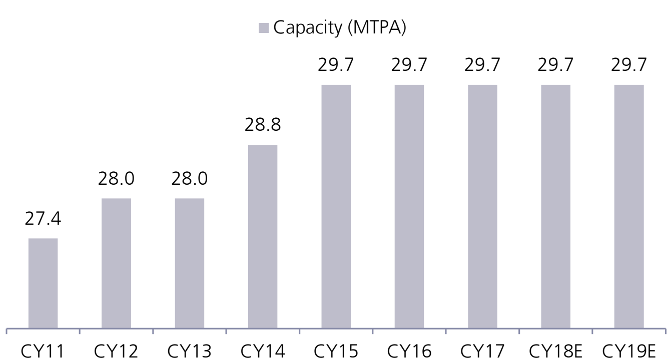
Source: Company, JM Financial

Capacity expansion and geographical split

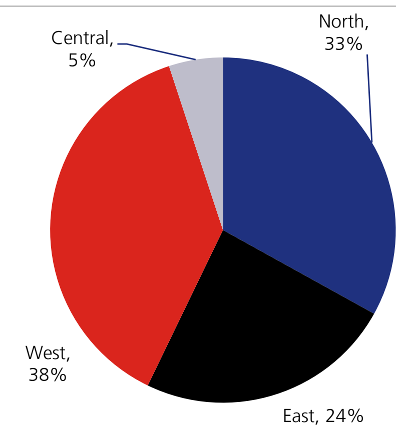
- Ambuja is setting up a clinker capacity of 3.1MTPA in Marwar Mundhwa in Rajasthan. In the first phase, the company is setting up a 1.7MTPA of unit at an investment of INR 13.9bn (USD125/t).

Exhibit 8. Ambuja - Capacity growth trends and geographical split

No incremental capacity addition till CY19 (Clinker in Rajasthan Under construction)



North and West are the major markets for Ambuja

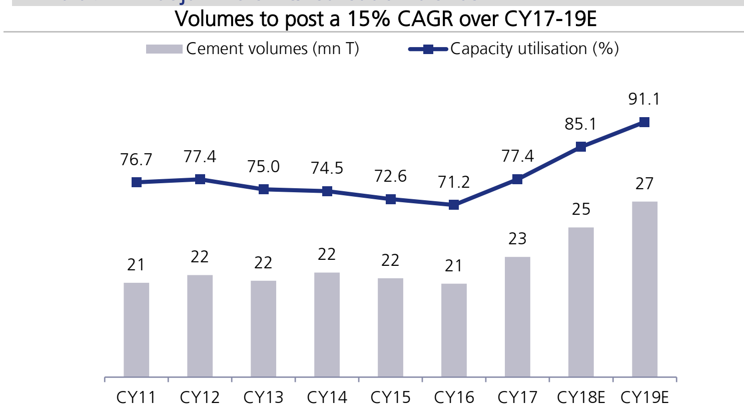


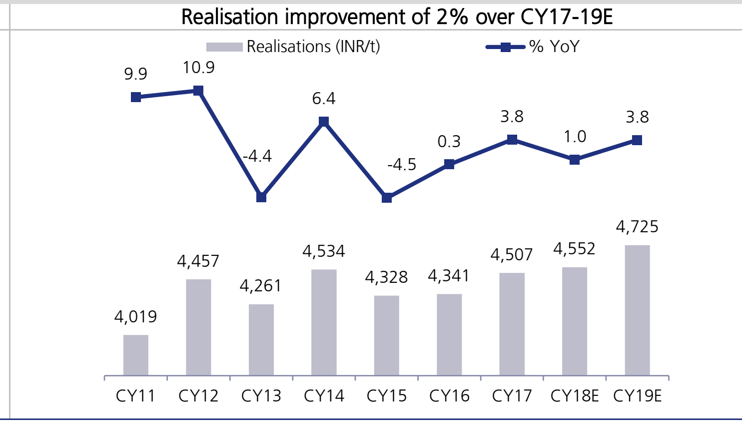
Source: Company, JM Financial

Operating parameters

- **Volume realisation trends –** We expect cement volumes to post a 7.9% CAGR over CY17-19E. Utilisation levels should improve from c.77% in CY17 to c.91% in CY19E. We factor in realisation improvement of c.1% in CY18E and c.4% in CY19E.

Exhibit 9. Ambuja – volume/realisation trends



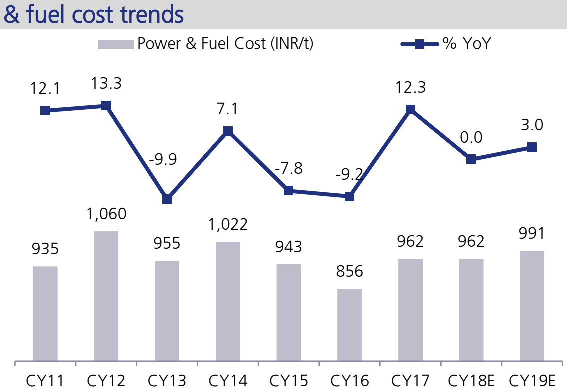


Source: Company, JM Financial

Cost trends

- **Power & fuel costs –** There was a sharp jump in power and fuel costs in CY17, primarily on account of an increase in petcoke/coal prices. We factor in a rise of 1.5% in power & fuel costs over CY17-19E

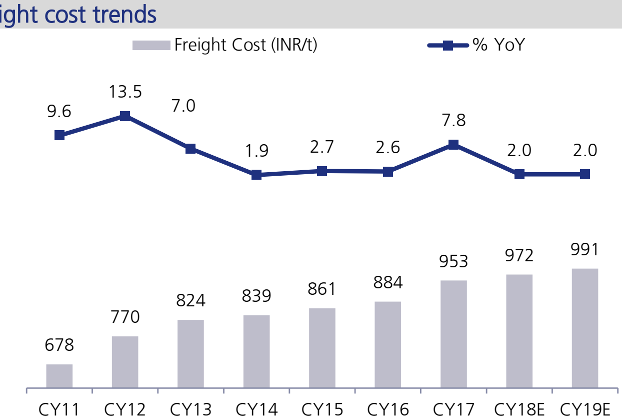
Exhibit 10. Power & fuel cost trends



Source: Company, JM Financial

- **Freight costs –** In CY17, freight costs significantly rose primarily due to an increase in diesel prices, leading to a rise in road freight. We factor in a freight cost increase of 2% in CY18E and CY19E.

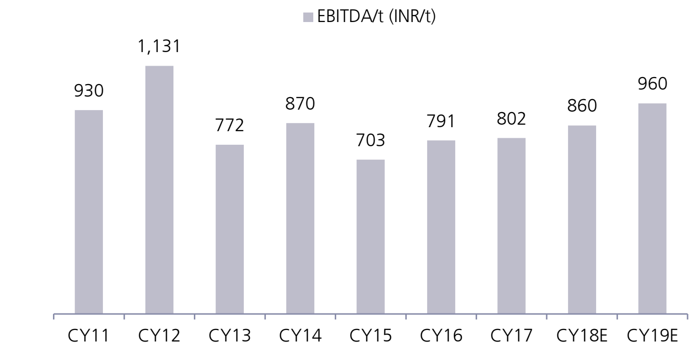
Exhibit 11. Freight cost trends



Source: Company, JM Financial

- **EBITDA/t –** We factor in EBITDA/t improvement of c.IN R50-60/t and c.INR 90-100/t in CY18E and CY19E, respectively, on profitability improvement over CY17-19E.

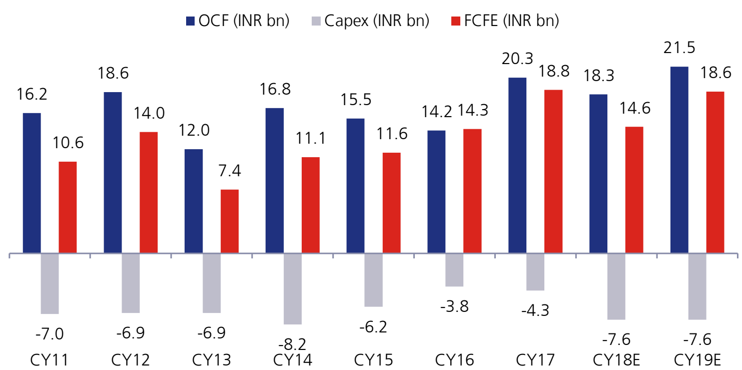
Exhibit 12. EBITDA/t trends



Source: Company, JM Financial

- **Cash flow trends –** Ambuja's operating cash flows are expected to improve over CY17-19E on better profitability and volumes. The limited capex expected will be fulfilled by the internal accruals.

Exhibit 13. Cash flow trends



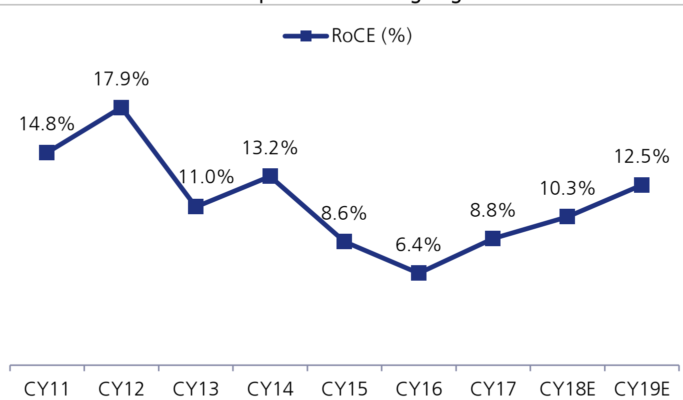
Source: Company, JM Financial

Return profile

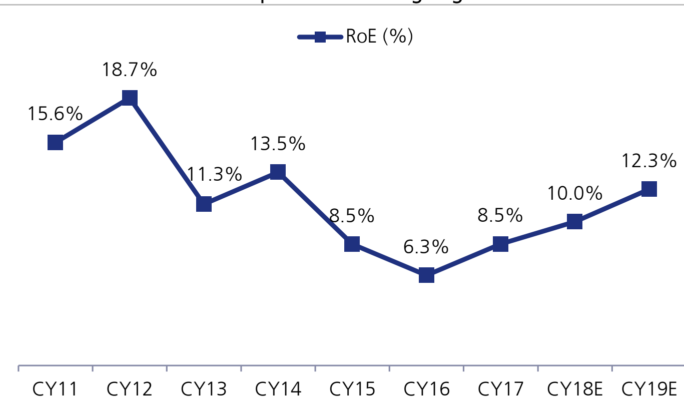
- We expect the company's RoCEs to improve from 8.8% in CY17 to 12.5% in CY19E and RoE to improve from 8.5% in CY17 to 12.3% in CY19E.

Exhibit 14. Return profile

RoCEs to improve to 12.5% going forward



RoEs to improve to 12.3% going forward

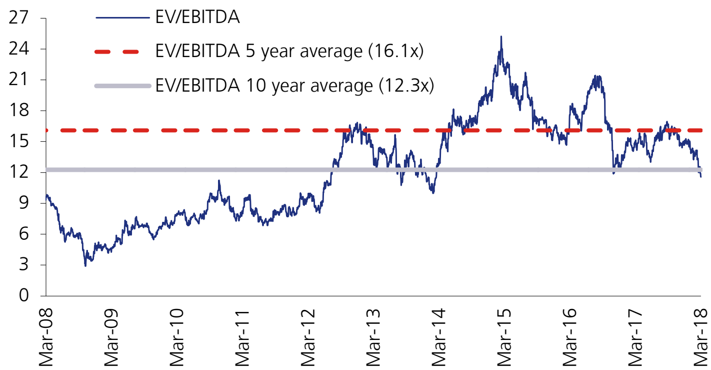


Source: Company, JM Financial

Valuation:

- Ambuja's valuation has been declining since Mar'15 on account of limited growth visibility. The stock is trading at a five-year average EVE multiple of 16.1x and ten-year average multiple of 12.3x.

Exhibit 15. ACEM - Valuation on a downtrend since Mar'15



Source: Company, JM Financial, Industry

- We are valuing the company by valuing the assets in operation and the option value of incremental expansion potential.
- Assets under operations are being valued at 12x one-year forward EVE
- Option value of incremental expansion potential is arrived at assuming execution of the incremental expansion by FY25 and discounted back.
- We arrive at a target price of c.INR 260/share for Ambuja. This implies a one-year forward EVE multiple of 12.8x for the company.

Exhibit 16. Valuation

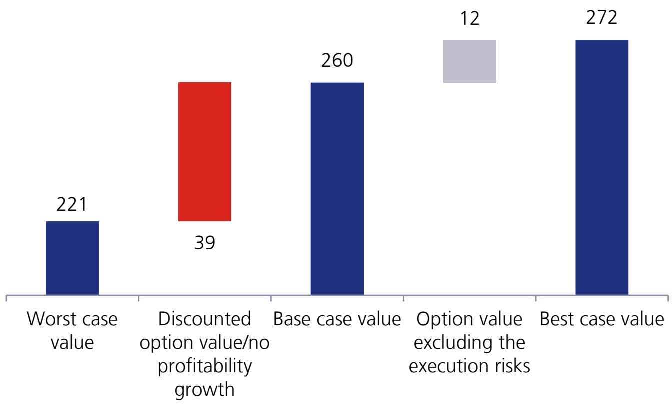
Current assets in operation	
Standalone EV (INR mn)	3,19,485
Net Debt (INR mn)	-50,092
Valuation (INR mn)	3,69,576
Option value of expansion potential	
Valuation (INR mn)	22,004
Value of ACC's stake	
ACC Valuation (INR mn)	3,14,015
% Holding	50%
Hold Co. Discount	20%
Attributable valuation (INR mn)	1,25,732
Total (INR mn)	5,17,312
O/s shares	1,986
Per share value (INR)	**260**

Source: JM Financial

Scenario analysis:

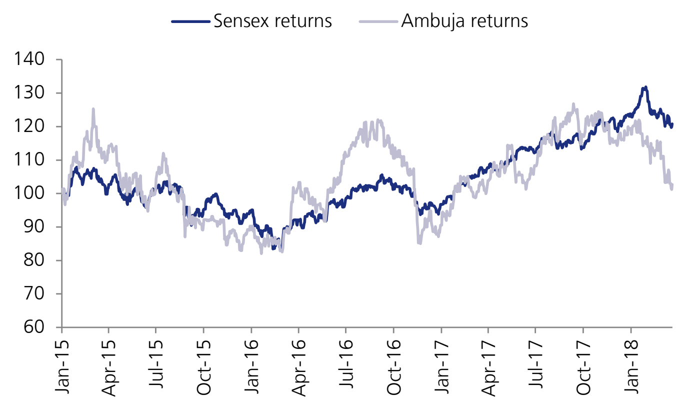
- In the worst case scenario, we have assumed no growth in EBITDA per ton for the next two years as pricing power remains limited. Additionally, we do not attribute any value to the expansion potential. In this scenario, we see the TP at INR 221.
- In a bull case scenario, we assume full expansion to come through along expected lines, resulting in a TP of INR 272.

Exhibit 17. Scenarios analysis



Source: JM Financial

Exhibit 18. Relative returns



	Sensex	Ambuja
1 yr return	13%	-1%
3 yr return	18%	-8%
5 yr return	77%	33%

Source: JM Financial, Bloomberg

- Key Risks: **(i)** Any increase in the royalty being paid to the parent Holcim will have a material impact on the earnings of the company; 1% increase in the royalty will adversely impact the EBITDA by 4-5%; **(ii)** Delay in the execution of the expansion potential will constrain the growth; Company has been losing market share owing to limited expansion; **(iii)** Adverse government action may impact the profitability of the cement companies; **(iv)** Delay in the demand recovery will have an impact on the industry, as the incremental capacity remains unabsorbed, players will compete for the market share.

Financial Tables (Consolidated)

Income Statement (INR mn)

Y/E March	CY15A	CY16A	CY17E	CY18E	CY19E
Net Sales	93,683	2,00,938	2,35,984	2,62,440	2,88,244
Sales Growth	-5.5%	114.5%	17.4%	11.2%	9.8%
Other Operating Income	931	0	0	4,100	4,489
Total Revenue	**94,614**	**2,00,938**	**2,35,984**	**2,66,540**	**2,92,733**
Cost of Goods Sold/Op. Exp	8,267	23,311	27,760	29,435	31,895
Personnel Cost	5,895	13,701	15,112	16,611	17,950
Other Expenses	65,137	1,32,114	1,54,536	1,77,583	1,91,460
EBITDA	**15,315**	**31,812**	**38,576**	**42,911**	**51,428**
EBITDA Margin	16.2%	15.8%	16.3%	16.1%	17.6%
EBITDA Growth	-20.6%	107.7%	21.3%	11.2%	19.8%
Depn. & Amort.	6,257	14,609	12,195	12,560	12,894
EBIT	9,058	17,203	26,381	30,351	38,534
Other Income	3,582	4,679	3,226	3,982	4,600
Finance Cost	918	1,530	2,058	1,944	1,910
PBT before Excep. & Forex	11,722	20,351	27,550	32,389	41,224
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	11,722	20,351	27,550	32,389	41,224
Taxes	3,091	5,738	8,229	9,374	11,932
Extraordinary Inc./Loss(-)	-556	-476	43	0	0
Assoc. Profit/Min. Int.(-)	0	3,177	4,158	5,394	6,867
Reported Net Profit	8,076	10,961	15,207	17,621	22,425
Adjusted Net Profit	**8,631**	**11,437**	**15,164**	**17,621**	**22,425**
Net Margin	9.1%	5.7%	6.4%	6.6%	7.7%
Diluted Share Cap. (mn)	1,551.9	1,985.7	1,985.7	1,985.7	1,985.7
Diluted EPS (INR)	**5.6**	**5.8**	**7.6**	**8.9**	**11.3**
Diluted EPS Growth	-34.7%	3.6%	32.6%	16.2%	27.3%
Total Dividend + Tax	5,230	6,505	6,505	11,616	11,616
Dividend Per Share (INR)	2.8	2.8	2.8	5.0	5.0

Source: Company, JM Financial

Balance Sheet (INR mn)

Y/E March	CY15A	CY16A	CY17E	CY18E	CY19E
Shareholders' Fund	1,03,069	1,98,209	2,06,722	2,12,727	2,23,536
Share Capital	3,104	3,971	3,971	3,971	3,971
Reserves & Surplus	99,965	1,94,238	2,02,751	2,08,756	2,19,564
Preference Share Capital	0	0	0	0	0
Minority Interest	0	43,702	46,080	51,474	58,341
Total Loans	233	0	0	0	0
Def. Tax Liab. / Assets (-)	5,649	10,153	11,392	11,392	11,392
Total - Equity & Liab.	**1,08,951**	**2,52,064**	**2,64,194**	**2,75,593**	**2,93,269**
Net Fixed Assets	65,062	2,19,924	2,15,654	2,15,731	2,15,474
Gross Fixed Assets	1,20,127	3,74,702	3,81,775	3,89,775	3,97,775
Intangible Assets	0	0	0	0	0
Less: Depn. & Amort.	59,206	1,60,599	1,72,793	1,85,353	1,98,247
Capital WIP	4,141	5,820	6,672	11,309	15,945
Investments	22,261	1,748	1,531	1,531	1,531
Current Assets	54,297	1,06,566	1,37,819	1,58,573	1,84,591
Inventories	8,955	21,635	24,583	27,766	30,494
Sundry Debtors	2,864	9,241	9,315	10,521	11,555
Cash & Bank Balances	28,484	45,640	62,316	78,680	1,00,936
Loans & Advances	9,411	2,876	3,239	3,239	3,239
Other Current Assets	4,583	27,175	38,367	38,367	38,367
Current Liab. & Prov.	32,669	76,174	90,810	1,00,241	1,08,326
Current Liabilities	6,893	20,842	28,225	37,656	45,741
Provisions & Others	25,776	55,332	62,585	62,585	62,585
Net Current Assets	21,628	30,393	47,009	58,331	76,264
Total – Assets	**1,08,951**	**2,52,064**	**2,64,194**	**2,75,593**	**2,93,269**

Source: Company, JM Financial

Cash Flow Statement (INR mn)

Y/E March	CY15A	CY16A	CY17E	CY18E	CY19E
Profit before Tax	11,722	19,950	27,550	32,389	41,224
Depn. & Amort.	6,257	14,632	12,195	12,560	12,894
Net Interest Exp. / Inc. (-)	918	1,405	2,058	1,944	1,910
Inc (-) / Dec in WCap.	228	2,513	10,486	5,042	4,322
Others	-506	-4,379	-3,226	-3,982	-4,600
Taxes Paid	-3,091	-5,972	-8,229	-9,374	-11,932
Operating Cash Flow	**15,528**	**28,151**	**40,834**	**38,579**	**43,818**
Capex	-6,169	-8,853	-7,925	-12,637	-12,637
Free Cash Flow	9,360	19,298	32,909	25,942	31,181
Inc (-) / Dec in Investments	1,457	-35,693	217	0	0
Others	3,882	3,558	3,226	3,982	4,600
Investing Cash Flow	**-829**	**-40,988**	**-4,482**	**-8,654**	**-8,037**
Inc / Dec (-) in Capital	256	2	0	0	0
Dividend + Tax thereon	-8,941	-8,736	-6,505	-11,616	-11,616
Inc / Dec (-) in Loans	36	24	84	0	0
Others	-2,148	-898	-13,255	-1,944	-1,910
Financing Cash Flow	**-10,796**	**-9,608**	**-19,677**	**-13,560**	**-13,526**
Inc / Dec (-) in Cash	**3,903**	**-22,445**	**16,676**	**16,365**	**22,255**
Opening Cash Balance	24,581	68,085	45,640	62,316	78,680
Closing Cash Balance	28,484	45,640	62,316	78,680	1,00,936

Source: Company, JM Financial

Dupont Analysis

Y/E March	CY15A	CY16A	CY17E	CY18E	CY19E
Net Margin	9.1%	5.7%	6.4%	6.6%	7.7%
Asset Turnover (x)	0.9	1.1	0.9	1.0	1.0
Leverage Factor (x)	1.1	1.2	1.3	1.3	1.3
RoE	8.5%	7.6%	7.5%	8.4%	10.3%

Key Ratios

Y/E March	CY15A	CY16A	CY17E	CY18E	CY19E
BV/Share (INR)	66.4	99.8	104.1	107.1	112.6
ROIC	12.4%	10.0%	9.6%	11.6%	15.1%
ROE	8.5%	7.6%	7.5%	8.4%	10.3%
Net Debt/Equity (x)	-0.5	-0.2	-0.3	-0.4	-0.5
P/E (x)	43.0	41.5	31.3	26.9	21.2
P/B (x)	3.6	2.4	2.3	2.2	2.1
EV/EBITDA (x)	27.8	14.9	11.9	10.4	8.4
EV/Sales (x)	4.5	2.4	1.9	1.7	1.5
Debtor days	11	17	14	14	14
Inventory days	35	39	38	38	38
Creditor days	31	45	52	61	69

Source: Company, JM Financial

ACC | HOLD

Growth contingent on project execution

JM FINANCIAL

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ACC Limited (ACC) has the potential to increase capacity by 15.3MTPA, based on its regulatory filings. However, we peg its feasible expansion potential at 9.8MTPA (29% of existing capacity) as clinker capacity is the key constraint. Additionally, clinker remains a bottleneck for the company's operations in South and West India. ACC's profitability continues to be impacted by its old plants that have higher running/maintenance costs. While a master service agreement (MSA) with Ambuja could improve logistics, limited benefits are expected from the arrangement in the medium term (3-5% of PBT). As demand improves, no capacity addition in 2-3 years limits the company's growth expectations as its existing capacity operates at 80%. We value existing assets at 10x EVE. Additionally, we factor in INR 64/share on account of its expansion potential. Our TP is INR 1,670/share. Maintain HOLD.

- **9.8MTPA of expansion potential:** ACC's regulatory filings with The Ministry of Environment & Forests (MoEF) indicate that it is working on capacity addition of 15.3MTPA. However, this is constrained by clinker availability, resulting in expansion potential of 9.8MTPA (29% of existing capacity). ACC has a key integrated greenfield potential of 8MTPA in South India, with brownfield expansion potential in Wadi and Kudithini. It has added 2.8MTPA capacity since CY11 (c.9% of total capacity) and most of its pipeline capacity is at the approval stage (5-7 years execution expected). Growth could be constrained primarily on high utilisation of existing assets (80%) and limited capacity addition in the next 2-3 years. Additionally, South is currently a saturated market in terms of capacity and would enter an upcycle only by 2027, in our view. If demand does not pick up in the region, we expect the capacity expansion in the region to be slow.

- **Merger with Ambuja deferred; MSA agreement:** The Boards of ACC and Ambuja announced that the companies will not pursue the proposed merger for the time being, owing to certain constraints on its implementation. However, the Boards have approved the mutual sale and purchase of materials/services through an MSA. This deferral would limit the expected synergies, impacting the multiple re-rating, especially for ACC (FY19 EV/EBITDA: 13x Ambuja vs. 11x ACC). Earlier in 2013, companies had indicated savings of INR 3.6bn-4.2bn on logistic optimisation. However, management has revised the savings estimate downward after the MSA arrangement to 3-5% of FY17 PBT for both companies; this translates to savings of INR 650mn for ACC (INR 23/t CY18).

- **ACC – high operating cost with limited tailwinds:** ACC is among the highest cost players as per JM's Relative Cost Index. Old plants with high maintenance costs impact the fixed cost component. We are building in EBITDA/t growth of INR 40-50/t in CY18 and INR 90-100/t in CY19E, factoring favourable operating leverage and MSA benefits. Any increase in royalty being paid to the parent Holcim would have a material impact on ACC's earnings; a 1% increase in royalty would impact EBITDA by 4-5%.

- **Maintain HOLD:** We value ACC's assets under operation at 10x EVE. We incorporate INR 64/share of value owing to its expansion potential, factoring in the execution risks. We arrive at a TP of INR 1,670/share and maintain a HOLD rating on the stock.

Recommendation and Price Target	
Current Reco.	HOLD
Previous Reco.	HOLD
Current Price Target (12M)	1,670
Upside/(Downside)	9.6%
Previous Price Target	1,630
Change	2.5%

Key Data – ACC IN	
Current Market Price	INR1,524
Market cap (bn)	INR286.2/US$4.4
Free Float	40%
Shares in issue (mn)	188.0
Diluted share (mn)	188.0
3-mon avg daily val (mn)	INR568.7/US$8.8
52-week range	1,870/1,391
Sensex/Nifty	33,174/10,184
INR/US$	65.0

Price Performance %	1M	6M	12M
Absolute	-6.7	-4.1	9.1
Relative*	-3.4	-10.0	-3.8

* To the BSE Sensex

Financial Summary					(INR mn)
Y/E March	CY15A	CY16A	CY17E	CY18E	CY19E
Net Sales	1,14,328	1,09,456	1,29,310	1,47,519	1,60,606
Sales Growth	-0.4%	-4.3%	18.1%	14.1%	8.9%
EBITDA	15,374	14,207	19,124	21,207	25,484
EBITDA Margin	13.0%	12.7%	14.4%	14.1%	15.6%
Adjusted Net Profit	7,521	6,430	9,203	10,788	13,735
Diluted EPS (INR)	40.0	34.2	49.0	57.4	73.1
Diluted EPS Growth	-35.3%	-14.5%	43.1%	17.2%	27.3%
ROIC	10.3%	8.8%	13.4%	16.3%	22.6%
ROE	9.0%	7.5%	10.1%	11.3%	13.8%
P/E (x)	38.1	44.6	31.1	26.6	20.9
P/B (x)	3.4	3.3	3.1	2.9	2.8
EV/EBITDA (x)	18.6	18.8	13.6	11.8	9.5
Dividend Yield	1.1%	1.1%	1.7%	2.0%	3.0%

Source: Company data, JM Financial. Note: Valuations as of 27/Mar/2018

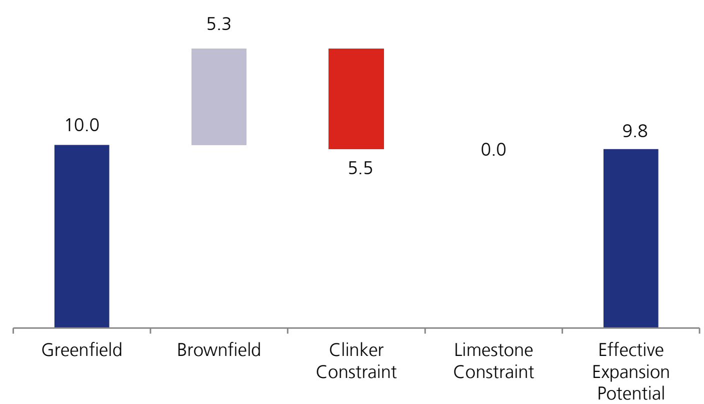
JM Financial Research is also available on: Bloomberg - JMFR <GO>, Thomson Publisher & Reuters S&P Capital IQ and FactSet

Please see Appendix I at the end of this report for Important Disclosures and Disclaimers and Research Analyst Certification.

9.8MTPA of Expansion Potential:

- ACC has a greenfield expansion potential of 10MTPA and brownfield expansion potential of 5.3MTPA, based on the approvals obtained/applications under process for environmental clearances.
- However, clearances obtained/under process for clinker constrain its effective grinding expansion potential by 5.5MTPA, reducing it to 9.8MTPA.

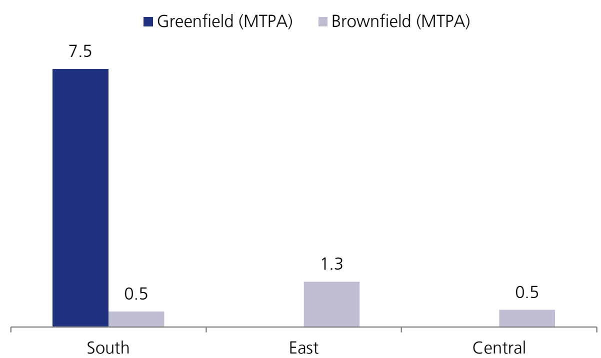
Exhibit 1. ACC – Effective expansion potential of c.10MTPA



Source: Company, JM Financial, Industry

- ACC has major greenfield integrated potential in South (Gollapalli) of 8MTPA. Additionally, it has grinding potential of 2MTPA in Uttarakhand. However, after factor in constraints, the potential is 7.5MTPA. Its existing plants have marginal expansion potential.

Exhibit 2. Region-wise greenfield/brownfield expansion potential



Source: Company, JM Financial, Industry

Exhibit 3. Greenfield capacity expansion potential – before constraints

Greenfield Potential	State	Region	Type	Grinding Potential	Clinker Potential
Integrated cement plant at Gollapalli	AP	South	integrated	8.00	5.00
Cement grinding unit at Uttarakhand	Uttarakhand	North	Grinding	2.00	
Total				**10.00**	**5.00**

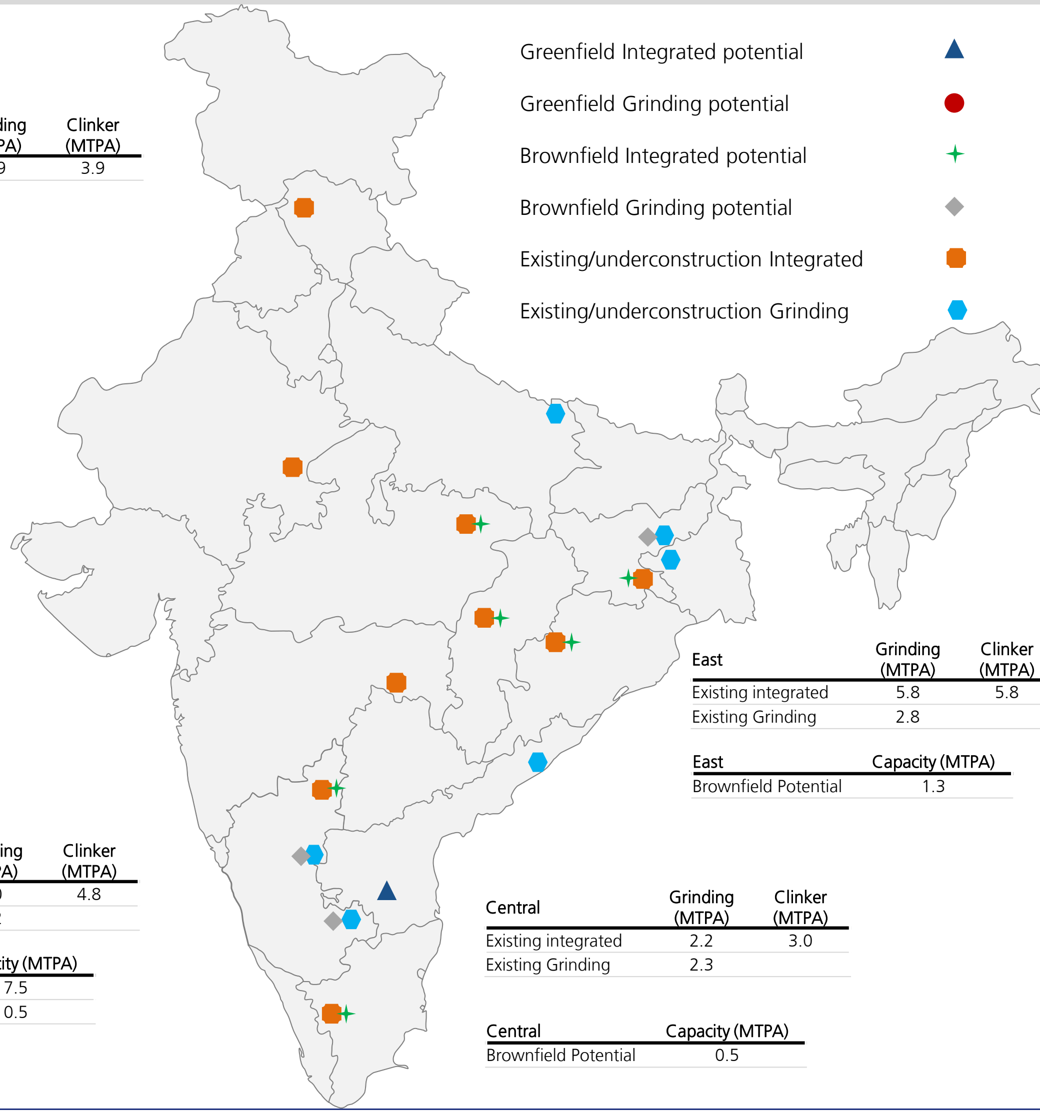
Source: Company, JM Financial, Industry

Exhibit 4. Brownfield capacity expansion potential – before constraints

Brownfield Potential	State	Region	Type	Capacity	Clinker
Wadi	Karnataka	South	Integrated	0.7	2.3
Kudithini	Karnataka	South	Grinding	1.8	
Others				2.8	
Total				5.3	3.0

Source: Company, JM Financial, Industry

Exhibit 5. Expansion Potential



North	Grinding (MTPA)	Clinker (MTPA)
Existing integrated	5.9	3.9

West	Grinding (MTPA)	Clinker (MTPA)
Existing integrated	4.1	2.3

East	Grinding (MTPA)	Clinker (MTPA)
Existing integrated	5.8	5.8
Existing Grinding	2.8	

East	Capacity (MTPA)
Brownfield Potential	1.3

South	Grinding (MTPA)	Clinker (MTPA)
Existing integrated	7.0	4.8
Existing Grinding	3.2	

South	Capacity (MTPA)
Greenfield Potential	7.5
Brownfield Potential	0.5

Central	Grinding (MTPA)	Clinker (MTPA)
Existing integrated	2.2	3.0
Existing Grinding	2.3	

Central	Capacity (MTPA)
Brownfield Potential	0.5

Source: Company, JM Financial

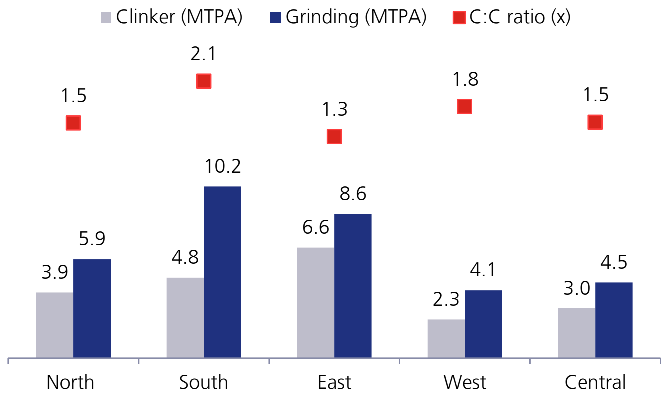
Merger with Ambuja

ACC's merger with Ambuja has been deferred by both Boards. However they have approved an MSA. For details, please refer to the Ambuja section.

Clinker capacity; a bottleneck in South and West India

- ACC's existing clinker capacity remains a bottleneck on growth in South and West India.

Exhibit 6. Clinker remains a bottleneck in South and West



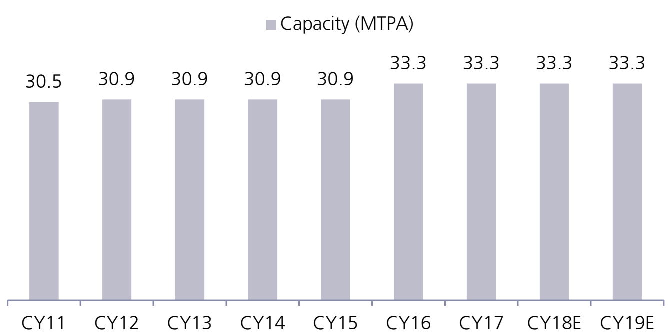
Source: Company, JM Financial C:C- Cement to Clinker

Capacity trends – No incremental supply in the pipeline

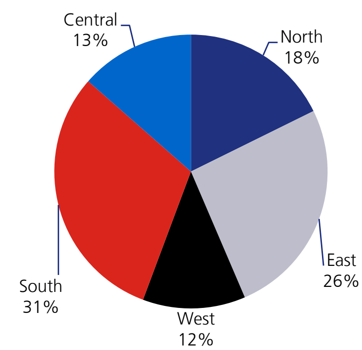
- ACC has added marginal capacity of 2.8MTPA (9% of the capacity) over CY11-17. Currently, there are no capacity expansion plans in the pipeline.

Exhibit 7. Capacity growth trends and geographical split

No incremental capacity expansion in the pipeline



South/East are the major markets



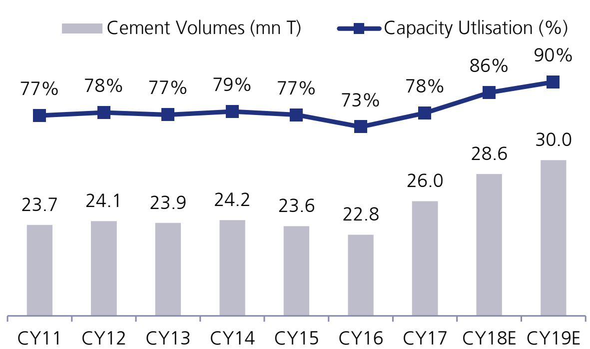
Source: Company, JM Financial

Operating parameters

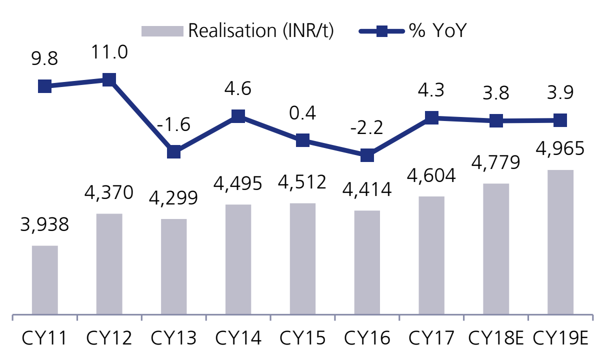
- **Volume/realisation trends –** ACC's utilisation in CY17 was nearly 80%; volume growth is constrained by capacity. We factor in a volume CAGR of 7.4% over CY17-19E with capacity utilisation going up to 90%. We factor in realisation improvement of c.4% in CY18E and CY19E.

Exhibit 8. Volume/realisation trends

Volumes - 7% CAGR over CY17-19E constrained by capacity



Realisation improvement of 4% in CY18E and CY19E

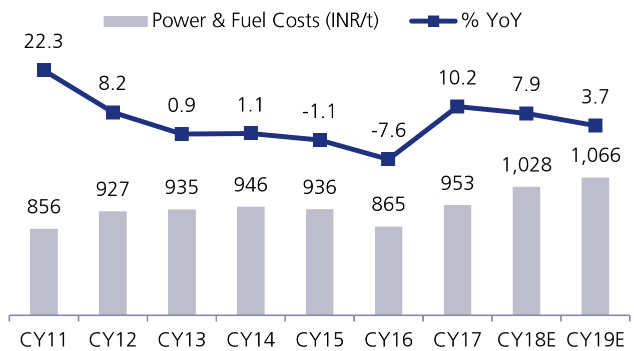


Source: Company, JM Financial

Cost trends

- **Power & fuel costs –** A sharp jump in power and fuel costs in CY17 was led primarily by an increase in petcoke/coal prices. We factor in a cost increase of 6% over CY17-19E.

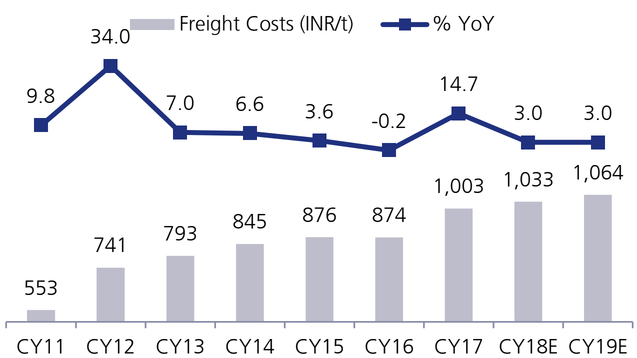
Exhibit 9. Power & fuel cost trends



Source: Company, JM Financial

- **Freight costs – A** significant rise in freight costs in CY17 was primarily led by an increase in diesel prices, leading to rise in road freight. We factor in a freight increase of 3% in CY18E and CY19E.

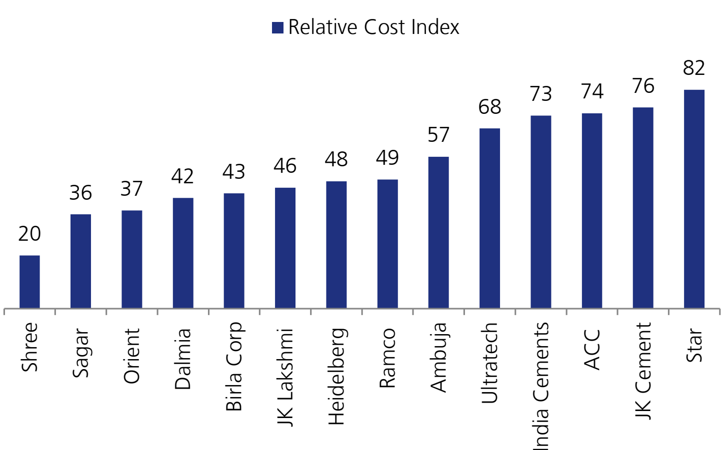
Exhibit 10. Freight cost trends



Source: Company, JM Financial

- **ACC; one of the highest cost players:** As per the JM Cost Index, ACC is among the most cost inefficient players in the industry. Old plants with high maintenance costs impact the fixed cost component. In an environment of demand uncertainty, any slight fluctuation in volumes would significantly impact its profitability.

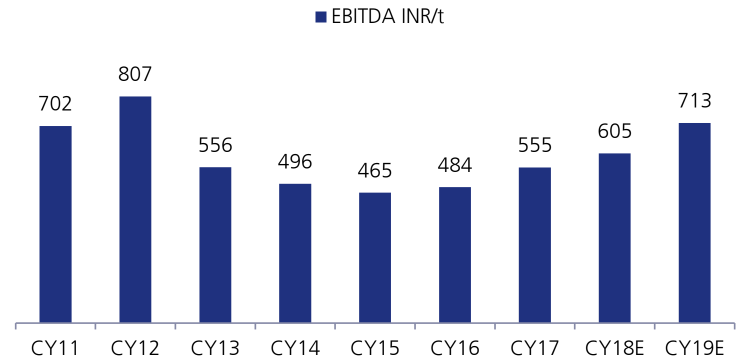
Exhibit 11. Relative cost index



Source: Company, JM Financial, Industry

- EBITDA/t – We factor in EBITDA/t improvement of c.INR 50-60/t and c.INR 90-100/t in CY18E and CY19E, respectively, on profitability improvement.

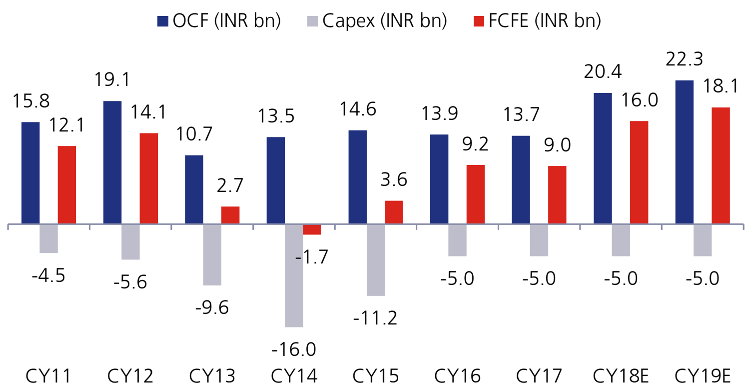
Exhibit 12. EBITDA/t trends



Source: Company, JM Financial

- Cash flow trends – We expect a significant free cash flow generation on account of limited incremental capex and sweating of the company's existing assets.

Exhibit 13. Cash flow trends



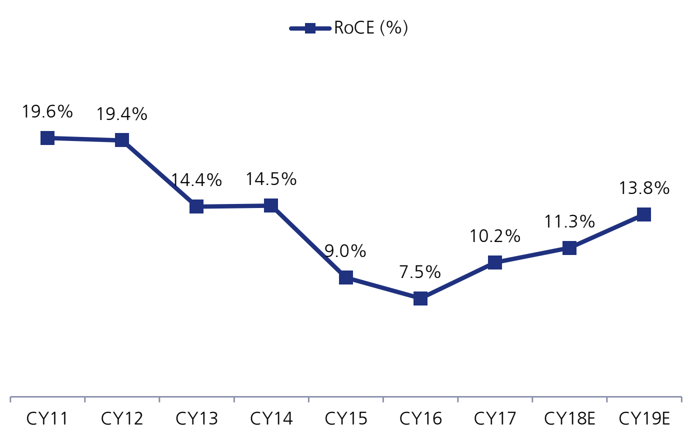
Source: Company, JM Financial

Return profile

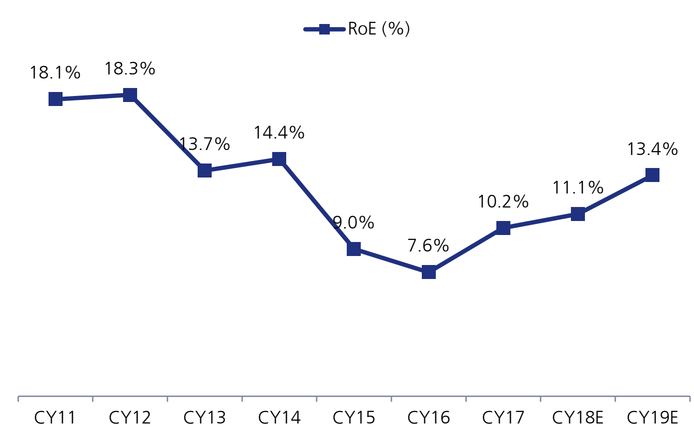
- We expect ACC's RoCEs to improve from 10.2% in CY17 to 13.8% in CY19E and RoE to improve from 10.2% in CY17 to 13.4% in CY19E.

Exhibit 14. Return profile

RoCEs to improve to 13.8% going forward



RoEs to improve to 13.4% going forward

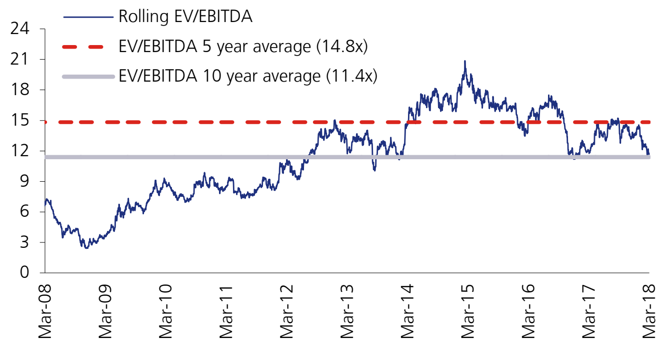


Source: Company, JM Financial

Valuation:

- ACC's valuation has been declining on account of its significant costs and limited growth visibility. The company is currently trading near its 10-year average EVE multiple.

Exhibit 15. ACC – Valuation on a decline



Source: Company, JM Financial, Industry

- We value ACC by valuing the assets in operation and the option value of incremental expansion potential.
- Assets under operations are being valued at 10x one-year forward EVE.
- Option value of incremental expansion potential is arrived at assuming execution of the incremental expansion by FY25 and discounted back.
- We arrive at a target price of c.INR 1,670/share for ACC. This implies a one-year forward EVE multiple of 10.4x.

Exhibit 16. ACC valuation

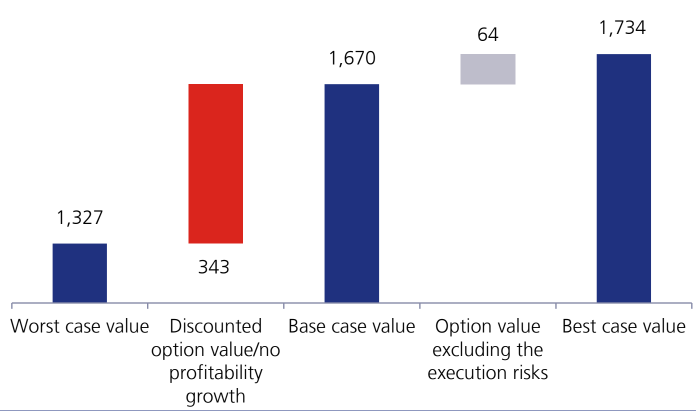
Current assets in operation	
EV (INR mn)	2,62,566
Net Debt (INR mn)	-39,582
Valuation (INR mn)	3,02,148
Option value of expansion potential	
Valuation (INR mn)	11,934
Total (INR mn)	**3,14,082**
O/s shares	**188**
Per share value (INR)	**1,670**

Source: Company, JM Financial

Scenario analysis:

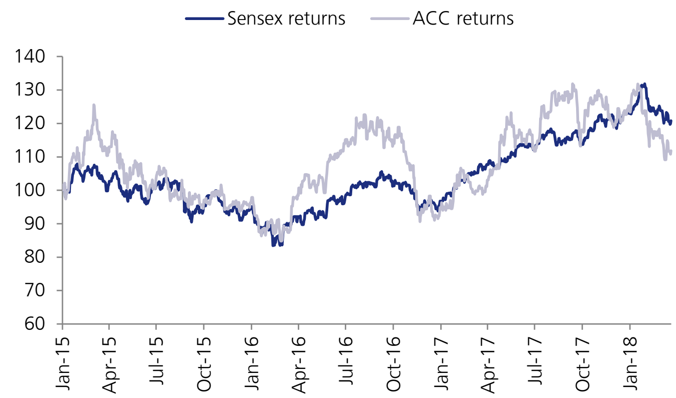
- The worst case scenario entails no growth on profitability (EBITDA/t remains at current levels) and no incremental value from expansion potential. The best case factors in no execution risk for pipeline capacity as we value the complete capacity.

Exhibit 17. Scenarios analysis



Source: JM Financial

Exhibit 18. Relative returns



	Sensex	ACC
1 yr return	13%	11%
3 yr return	18%	0%
5 yr return	77%	37%

Source: JM Financial, Bloomberg

- Key Risks: **(i)** Any increase in the Royalty being paid to the parent - Holcim – would have a material impact on ACC's earnings; a 1% increase in royalty would adversely impact the EBITDA by 4-5%. **(ii)** A delay in the execution of the expansion potential could constrain ACC's growth; the company has been losing market share owing to limited expansion. **(iii)** Adverse government action may impact the profitability of the cement companies. **(iv)** A delay in demand recovery could have an impact on the industry; as the incremental capacity remains unabsorbed, players will compete for market share.

Financial Tables (Consolidated)

Income Statement (INR mn)

Y/E March	CY15A	CY16A	CY17E	CY18E	CY19E
Net Sales	1,14,328	1,09,456	1,29,310	1,47,519	1,60,606
Sales Growth	-0.4%	-4.3%	18.1%	14.1%	8.9%
Other Operating Income	3,644	2,219	3,542	2,950	3,212
Total Revenue	**1,17,972**	**1,11,676**	**1,32,851**	**1,50,470**	**1,63,818**
Cost of Goods Sold/Op. Exp	17,398	16,043	17,071	19,126	20,533
Personnel Cost	7,722	7,899	8,214	9,205	9,788
Other Expenses	77,477	73,527	88,443	1,00,932	1,08,013
EBITDA	**15,374**	**14,207**	**19,124**	**21,207**	**25,484**
EBITDA Margin	13.0%	12.7%	14.4%	14.1%	15.6%
EBITDA Growth	1.6%	-7.6%	34.6%	10.9%	20.2%
Depn. & Amort.	6,626	6,151	6,436	6,574	6,794
EBIT	8,748	8,056	12,688	14,633	18,690
Other Income	1,198	1,072	1,289	1,402	1,455
Finance Cost	646	689	985	776	678
PBT before Excep. & Forex	9,300	8,439	12,991	15,258	19,468
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	9,300	8,439	12,991	15,258	19,468
Taxes	1,900	2,096	3,897	4,578	5,840
Extraordinary Inc./Loss(-)	-1,645	-386	0	0	0
Assoc. Profit/Min. Int.(-)	115	89	109	111	111
Reported Net Profit	5,876	6,044	9,203	10,788	13,735
Adjusted Net Profit	**7,521**	**6,430**	**9,203**	**10,788**	**13,735**
Net Margin	6.4%	5.8%	6.9%	7.2%	8.4%
Diluted Share Cap. (mn)	188.0	188.0	188.0	188.0	188.0
Diluted EPS (INR)	**40.0**	**34.2**	**49.0**	**57.4**	**73.1**
Diluted EPS Growth	-35.3%	-14.5%	43.1%	17.2%	27.3%
Total Dividend + Tax	3,841	3,842	5,883	6,788	10,182
Dividend Per Share (INR)	17.0	17.0	26.0	30.0	45.0

Source: Company, JM Financial

Balance Sheet (INR mn)

Y/E March	CY15A	CY16A	CY17E	CY18E	CY19E
Shareholders' Fund	84,211	88,134	93,559	97,559	1,01,111
Share Capital	1,880	1,880	1,880	1,880	1,880
Reserves & Surplus	82,332	86,254	91,679	95,679	99,231
Preference Share Capital	0	0	0	0	0
Minority Interest	27	28	29	29	29
Total Loans	0	0	0	0	0
Def. Tax Liab. / Assets (-)	4,704	4,563	5,516	5,516	5,516
Total - Equity & Liab.	**88,942**	**92,725**	**99,103**	**1,03,103**	**1,06,656**
Net Fixed Assets	77,269	78,288	75,493	73,919	72,125
Gross Fixed Assets	1,15,553	1,43,350	1,46,909	1,51,909	1,56,909
Intangible Assets	0	0	0	0	0
Less: Depn. & Amort.	62,244	67,673	74,109	80,683	87,477
Capital WIP	23,961	2,610	2,693	2,693	2,693
Investments	13,142	1,172	949	949	949
Current Assets	37,589	54,480	72,016	84,267	94,412
Inventories	11,894	12,246	14,048	16,026	17,448
Sundry Debtors	4,844	5,332	6,660	7,598	8,272
Cash & Bank Balances	940	19,772	27,286	36,621	44,670
Loans & Advances	14,696	2,290	2,640	2,640	2,640
Other Current Assets	5,214	14,840	21,383	21,383	21,383
Current Liab. & Prov.	39,058	41,214	49,355	56,032	60,830
Current Liabilities	0	0	0	0	0
Provisions & Others	39,058	41,214	49,355	56,032	60,830
Net Current Assets	-1,469	13,266	22,661	28,235	33,582
Total – Assets	**88,942**	**92,725**	**99,103**	**1,03,103**	**1,06,656**

Source: Company, JM Financial

Cash Flow Statement (INR mn)

Y/E March	CY15A	CY16A	CY17E	CY18E	CY19E
Profit before Tax	9,300	8,053	12,991	15,258	19,468
Depn. & Amort.	8,270	6,151	6,436	6,574	6,794
Net Interest Exp. / Inc. (-)	646	689	985	776	678
Inc (-) / Dec in WCap.	518	2,156	-1,532	3,761	2,703
Others	-1,861	-391	-1,289	-1,402	-1,455
Taxes Paid	-2,308	-2,753	-3,897	-4,578	-5,840
Operating Cash Flow	**14,566**	**13,905**	**13,695**	**20,390**	**22,347**
Capex	-11,194	-5,013	-5,000	-5,000	-5,000
Free Cash Flow	3,372	8,892	8,695	15,390	17,347
Inc (-) / Dec in Investments	1,532	-1,117	0	0	0
Others	622	780	1,398	1,509	1,562
Investing Cash Flow	**-9,041**	**-5,350**	**-3,602**	**-3,491**	**-3,438**
Inc / Dec (-) in Capital	-413	-459	-985	-776	-678
Dividend + Tax thereon	-6,750	-3,853	-5,883	-6,788	-10,182
Inc / Dec (-) in Loans	0	2	0	0	0
Others	776	14,586	4,289	0	0
Financing Cash Flow	**-6,387**	**10,276**	**-2,579**	**-7,564**	**-10,860**
Inc / Dec (-) in Cash	**-861**	**18,831**	**7,514**	**9,335**	**8,050**
Opening Cash Balance	1,802	940	19,772	27,286	36,621
Closing Cash Balance	940	19,772	27,286	36,621	44,670

Source: Company, JM Financial

Dupont Analysis

Y/E March	CY15A	CY16A	CY17E	CY18E	CY19E
Net Margin	6.4%	5.8%	6.9%	7.2%	8.4%
Asset Turnover (x)	1.3	1.2	1.4	1.5	1.6
Leverage Factor (x)	1.1	1.1	1.1	1.1	1.1
RoE	9.0%	7.5%	10.1%	11.3%	13.8%

Key Ratios

Y/E March	CY15A	CY16A	CY17E	CY18E	CY19E
BV/Share (INR)	448.1	468.8	497.7	519.0	537.9
ROIC	10.3%	8.8%	13.4%	16.3%	22.6%
ROE	9.0%	7.5%	10.1%	11.3%	13.8%
Net Debt/Equity (x)	0.0	-0.2	-0.3	-0.4	-0.4
P/E (x)	38.1	44.6	31.1	26.6	20.9
P/B (x)	0.0	0.0	0.0	0.0	0.0
EV/EBITDA (x)	18.6	18.8	13.6	11.8	9.5
EV/Sales (x)	2.4	2.4	2.0	1.7	1.5
Debtor days	15	17	18	18	18
Inventory days	37	40	39	39	39
Creditor days	0	0	0	0	0

Source: Company, JM Financial

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Dalmia Bharat | BUY

Growth through inorganic expansion; execution remains the key

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Dalmia Bharat Ltd (DBL) has expansion potential of 15.7MTPA after factoring in clinker constraints; 13.1MTPA of this is greenfield potential spread across North, South and East India, while brownfield potential is present in the South. DBL is expanding its presence by acquiring stressed assets; 1MTPA in Kalyanpur Cement and 3MTPA in Murli Industries. Its resolution proposal for Binani Cement has been recommended to the National Company Law Tribunal (NCLT) by the Committee of Creditors (CoC). Acceptance of the proposal will mark DBL's entry in the North India market, where it has 5MTPA of greenfield potential. DBL has pared down its debt over the past few years with debt-to-EBITDA of 2x in Dec'17 from 3.8x in Mar'16. We value existing assets at 12x EVE along with INR 355/share through the option value of expansion potential. Our TP is INR 3,420. We maintain BUY rating.

- **15.7MTPA of expansion potential:** DBL has capacity expansion potential of 15.7MTPA, of which 13.1MTPA is greenfield, while 2.6MTPA is brownfield. The company has clearances available in c.80% of its greenfield potential. Its 11MTPA brownfield potential is constrained by clinker availability, resulting in a feasible capacity of 2.6MTPA. Rajputana Properties' (earlier a DBL subsidiary) bid for Binani Cement has been approved and recommended to the NCLT. Rajputana Properties has additional greenfield expansion potential of 5MTPA in Rajasthan. Most of its projects have received clearances, providing comfort on execution. However, we factor in a marginal execution risk on account of the company's entry into a new geography.

- **Acquisition of stressed assets; value contingent upon execution:** DBL acquired Murli Industries (3MTPA in Chandrapur) and Kalyanpur Cement (1.1MTPA in Bihar) through an auction under Insolvency & Bankruptcy Code (IBC) proceedings. DBL acquired these assets at a relatively low valuation of USD 55/t for Kalyanpur and USD 20/t for Murli Industries; the transactions are likely to be completed by 1HFY19. Currently, these assets are not operational. DBL is slated to incur additional capex of INR 4bn (INR 1bn in Kalyanpur and INR 3bn in Murli Industries) for asset ramp-up. However, management is confident that the acquisitions will be EBITDA positive from the first year of operations.

- **Leverage in the comfort zone despite acquisitions:** DBL significantly reduced its net debt from c.INR 60.2bn at end-Mar'16 to INR 39.5bn at end-Dec'17. Its net debt-to-EBITDA dropped from 3.8x to 2x over the same period. By repaying a large portion of the high-cost debt, the company also successfully brought down its interest cost down to 8% in 3QFY18. Going forward, we estimate free cash flow generation of INR 23bn, which would further help bring down DBL's net debt significantly. Management is comfortable with a net debt-to-EBITDA ratio of 3.5x.

- **Maintain BUY:** We value DBL's existing assets at 12x EVE. Additionally, we incorporate INR 355/share on account of the company's expansion potential, factoring in execution risks. We arrive at a TP of INR 3,420/share and maintain our BUY rating on the stock.

Recommendation and Price Target	
Current Reco.	BUY
Previous Reco.	BUY
Current Price Target (12M)	3,420
Upside/(Downside)	19.6%
Previous Price Target	3,100
Change	10.3%

Key Data – DBEL IN	
Current Market Price	INR2,859
Market cap (bn)	INR254.9/US$3.9
Free Float	69%
Shares in issue (mn)	89.0
Diluted share (mn)	89.0
3-mon avg daily val (mn)	INR483.9/US$7.4
52-week range	3,350/2,040
Sensex/Nifty	33,627/10,332
INR/US$	65.0

Price Performance

%	1M	6M	12M
Absolute	7.1	3.8	35.3
Relative*	6.1	-1.8	20.4

* To the BSE Sensex

Financial Summary					(INR mn)
Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Sales	64,113	74,044	84,520	1,00,891	1,15,916
Sales Growth (%)	90.6	15.5	14.1	19.4	14.9
EBITDA	15,916	19,019	20,291	23,574	26,834
EBITDA Margin (%)	24.8	25.7	24.0	23.4	23.1
Adjusted Net Profit	1,900	3,448	5,967	8,888	11,814
Diluted EPS (INR)	21.4	38.7	67.0	99.9	132.8
Diluted EPS Growth (%)	2,488.4	80.9	73.0	49.0	32.9
ROIC (%)	5.0	7.3	9.5	11.6	13.9
ROE (%)	5.0	7.2	11.4	15.2	17.5
P/E (x)	133.4	73.8	42.6	28.6	21.5
P/B (x)	5.5	5.1	4.6	4.1	3.5
EV/EBITDA (x)	21.7	17.8	16.0	13.5	11.4
Dividend Yield (%)	0.1	0.1	0.2	0.0	0.2

Source: Company data, JM Financial. Note: Valuations as of 06/Apr/2018

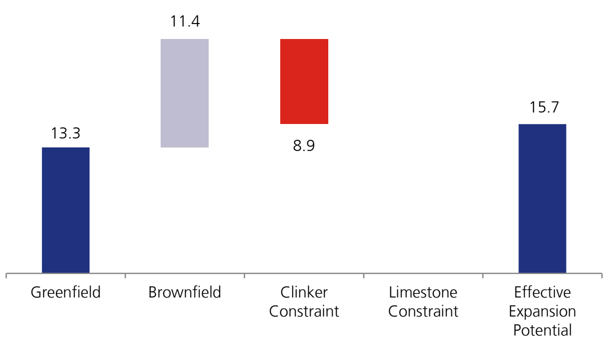
JM Financial Research is also available on: Bloomberg - JMFR <GO>, Thomson Publisher & Reuters S&P Capital IQ and FactSet

Please see Appendix I at the end of this report for Important Disclosures and Disclaimers and Research Analyst Certification.

c.15.7 MTPA of Expansion Potential:

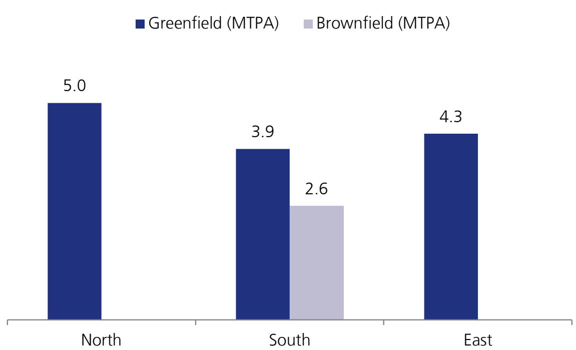
- Dalmia Bharat Ltd (DBL) has a greenfield expansion potential of 13.3MTPA and brownfield expansion potential of 11.4MTPA, based on the approvals obtained/applications under process for environmental clearances.
- However, clearances obtained/under process for clinker constrain its grinding expansion potential by 8.9MTPA, reducing the effective grinding expansion potential to 15.7MTPA.
- Additionally, the company is in process of acquiring:
  - Murli Industries Ltd – 3MTPA integrated unit in Vidarbha, Maharashtra at INR 4.02bn (USD 20/t), with incremental capex of INR 3bn to get the plant up and running.
  - Kalyanpur Cement – 1.1MTPA integrated unit in Bihar at INR 3.5bn (USD 55/t), with incremental capex of INR 1bn to ramp up capacity.

Exhibit 1. Dalmia Bharat – Effective expansion potential of c.16MTPA



Source: Company, JM Financial, Industry

Exhibit 2. Region-wise greenfield/brownfield potential



Source: Company, JM Financial, Industry

Exhibit 3. Greenfield capacity expansion potential – before constraints

Greenfield Potential	State	Region	Type	Grinding Potential	Clinker Potential
Proposed plant at Gulbarga	Karnataka	South	Integrated	4.0	2.6
Integrated cement plant - Chittorgarh	Rajasthan	North	Integrated	5.0	3.3
Others				4.3	4.4
Total				13.3	10.3

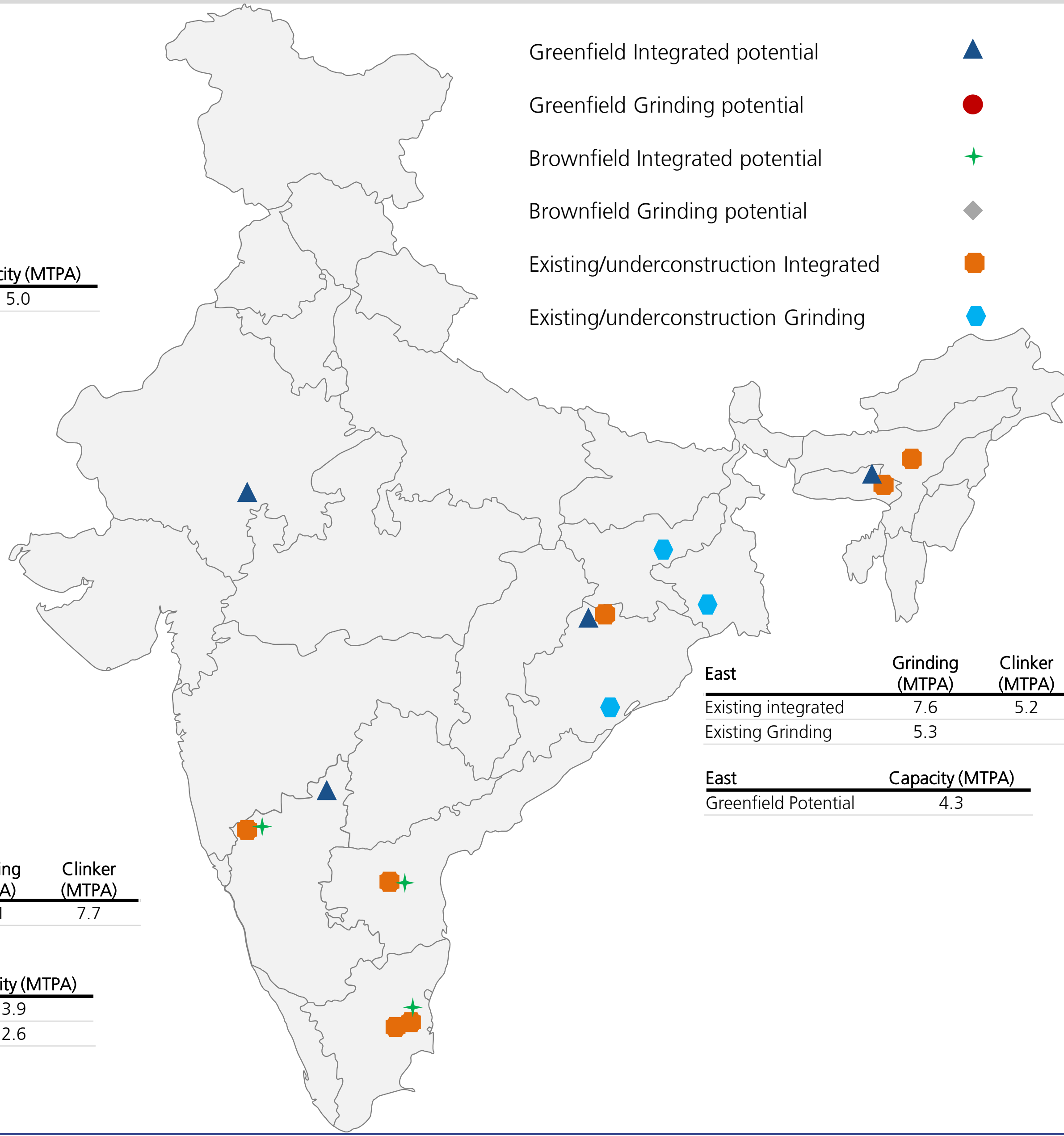
Source: Company, JM Financial, Industry

Exhibit 4. Brownfield capacity expansion potential – before constraints

Brownfield Potential	State	Region	Type	Capacity	Clinker
Cement grinding unit at Salboni	WB	East	Grinding	2.7	
Kadapa	AP	South	Integrated	1.5	0.9
Others				7.2	1.5
Total				11.4	2.4

Source: Company, JM Financial, Industry

Exhibit 5. Expansion Potential



North	Capacity (MTPA)
Greenfield Potential	5.0

East	Grinding (MTPA)	Clinker (MTPA)
Existing integrated	7.6	5.2
Existing Grinding	5.3	

East	Capacity (MTPA)
Greenfield Potential	4.3

South	Grinding (MTPA)	Clinker (MTPA)
Existing integrated	12.1	7.7

South	Capacity (MTPA)
Greenfield Potential	3.9
Brownfield Potential	2.6

Source: Company, JM Financial

Inorganic expansion by acquiring stressed assets

Kalyanpur Cement

- DBL is set to acquire Kalyanpur Cement after the Committee of Creditors approves the debt resolution plan it has submitted. DBL submitted a bid of INR 3.5bn for the asset at USD 55/t. However, management said the asset has incentives receivable of INR 2.5bn. The company is slated to incur additional capex on INR 1bn to ramp up capacity.
- The resolution plan has now been recommended to the NCLT for its approval and the acquisition is expected to be completed in 1QFY19.

Exhibit 6. Kalyanpur Cement details

Kalyanpur Cement

Cement capacity: 1.1MTPA

Clinker: 0.7MTPA

Location: Rohtas, Bihar

Markets: East

Source: Company, Industry, JM Financial

Limestone mine issue:

- The Government of Bihar has not renewed the only major operative limestone mining lease – Murli Pahari – since Dec'13.
- Its limestone requirements were being met through an old lease with fewer deposits.
- The company is pursuing the state government for renewal/extension of the mining lease.
- A resolution should come once environment clearances have been received and eco-sensitive zones have been notified.

Murli Industries

- DBL's debt resolution proposal for Murli Industries has been approved by the Committee of Creditors. The proposal provides for a payment of INR 4.02bn, valuing the asset at USD 20/t (an 80% haircut to its c.INR 18bn debt). Additionally, there will be capex of INR 3bn to get the asset up and running. The acquisition should be completed in 4-6 months upon NCLT approval.
- As per the management, asset has enough limestone mine reserves available with it to last operations for 20 years
- Management indicated the acquisition to be EBITDA positive from the first year of its operation

Exhibit 7. Murli Industries details

Murli Industries Ltd

Cement capacity: 3MTPA

Clinker: 2MTPA

Location: Chandrapur, Maharashtra

Markets: Central and Western

Captive Power Plant: 50MW

Source: Industry, Company, JM Financial

Binani Cement Assets:

- Company has entered into a 50:50 JV with Bain-Piramal Resurgence fund to bid for Binani Cement Assets. Dalmia's bid for the Assets has been approved by committee of creditors and has been recommended to NCLT for its approval. The bid at INR63.13bn for 80% stake in 11.25MTPA of assets (6.25MTPA in Rajasthan, 3MTPA clinker in China and 2MTPA grinding in Dubai) implies a valuation of c.USD140/t for the assets – adjusting for the overseas assets. Additionally, Dalmia will infuse the incremental capex of INR4bn for ramping up the capacity.
- Ultratech in the race – Ultratech has agreed to provide a comfort letter to Binani Industries for payment of INR72.66bn against an offer for sale of its entire equity shareholding (98.43%) to Ultratech. Binani Industries is looking to pay back the lenders and other creditors for termination of IBC proceedings against the Cement subsidiary. Binani Industries has been independently seeking termination of the insolvency proceedings with respect to Binani Cement Ltd.
- History: Ultratech earlier had increased its bid for Binani cement by INR7bn to INR72.5bn and had agreed to pay the entire amount upfront. Assuming the proposal was for acquisition of 80% stake with 20% being offered to lenders, Ultratech valued the assets at c.USD170/t adjusting for overseas assets. However, the resolution professional had already declared Dalmia as the highest bidder and had invited the company for negotiation of the resolution proposal.
- As per media reports (Source), operational creditors of Binani Cement have rejected Dalmia's resolution plan for Binani Cement. Binani Cement owes INR7bn (INR5.03bn as verified by resolution professional) to the operational creditors. Dalmia has offered to pay INR 1.5bn as per the resolution plan submitted by the company. Matter is currently under NCLT for further hearing

Exhibit 8. Binani Cement details

Binani Cement

Cement capacity: 11.25MTPA

Regionwise:

6.25MTPA - Rajasthan

3MTPA clinker - China

2MTPA grinding – Dubai

Markets: Northern markets of India can be serviced through Binani Assets

Source: Industry, Company, JM Financial

- Binani Cement; an operational asset: Binani Cement has been an operational asset; FY17 capacity utilisation was c.60% and EBITDA/t was c.INR 200/t during FY17. This explains the interest of major players in the asset. Ultratech already operates in the region. However, for DBL, the Binani Cement acquisition will mark its entry into a new geography. Dalmia - through Rajputana Properties - has greenfield integrated expansion potential of 5MTPA in the region.

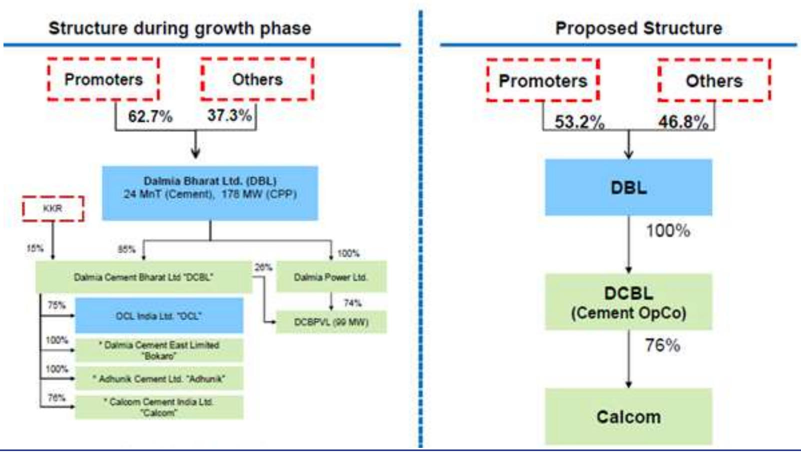
KKR transaction details

- In Jan'16, DBL provided an exit to KKR by acquiring DCBL's 15% stake through a mix of cash and share issue. DBL issued 7.5mn equity shares to KKR at INR 825 per share, resulting in an 8.5% dilution. DBL also paid INR 6bn in cash. The overall consideration worked out to INR 12.2bn. After the acquisition, DCBL became 100%-owned subsidiary of DBL. The exit was provided at c.12% premium to the prevailing implied valuation of DBL. The deal implies a valuation of INR 81bn for the cement business (INR 69bn for an 85% stake), which compared with the market cap of the listed entity at INR 62bn (Jan'16). The listed entity derives almost all its value from its 85% holding in DCBL.
- Subsequently in Apr'17, KKR completely exited DBL through the "on market sale" of the shares held by it. Subsequent to the sale of shares held by KKR, Dalmia received INR 5.9bn under the terms of placement agreement entered into with KKR.

OCL Dalmia merger: improves cash allocation flexibility

- The OCL-Dalmia merger involves DBL being merged with OCL Ltd, further simplifying the structure after the restructuring of KKR's holdings (transfer of holding from Dalmia Cement to DBL). Each DBL shareholder is slated to receive 2 shares of OCL Ltd (177.6 mn shares) while the existing holding of DBL in OCL will be cancelled (42.5mn shares).
- After the merger DBL will have only one subsidiary with minority holding (Calcom - 76% held). During the process of restructuring, which began in Jan'16, DBL undertook the amalgamation of the Bokaro asset, Adhunik Cement and OCL and transferred power assets from Dalmia Power. DBL has significantly improved its structure to improve cash flow flexibility among various units.
- **Status:** The merger of the group companies has received 100% approval from shareholders, secured and unsecured creditors and is waiting for NCLT's sanction.

Exhibit 9. Change in the company's structure



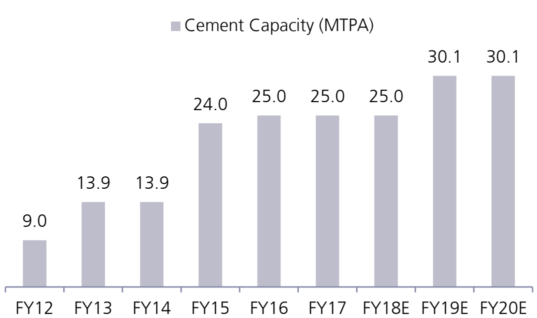
Source: Company

Capacity expansion and geographical split

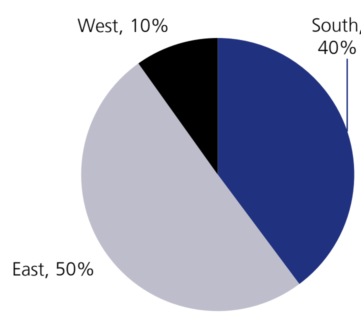
- Dalmia is in the process of acquiring 4.1MTPA through Kalyanpur Cement and Murli Industries, in addition to its debottlenecking exercise in OCL.
- The company will gain entry into the West India market through the acquisition of Murli.

Exhibit 10. Capacity growth trends and geographical split

Capacity of 30.1MTPA incorporating Murli and Kalyanpur



South and East are DBL's primary markets



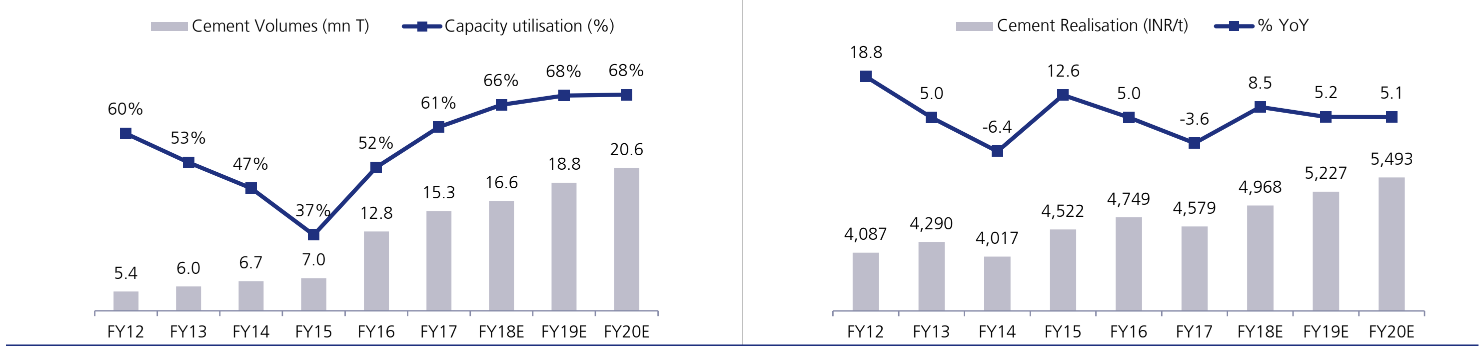
Source: Company, JM Financial

Operating parameters

- **Volume realisation trends –** We expect cement volumes to post a 12% CAGR over FY18-20E. Utilisation levels should improve from 60% in FY17 to c.70% in FY20E. We factor in realisation improvement of 5-6% in FY19E and FY20E.

Exhibit 11. TRCL – Volume/realisation trends

Volumes to post 12% CAGR over FY18-20E | Realisation improvement of 5-6% in FY19E and FY20E

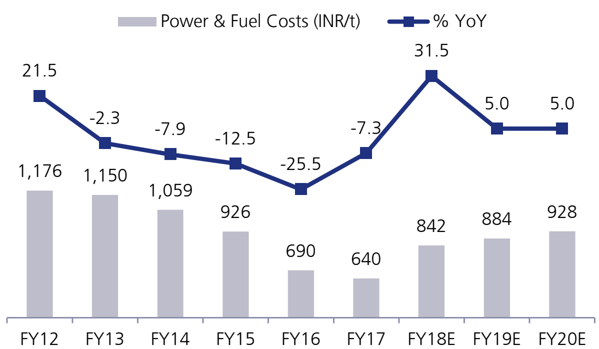


Source: Company, JM Financial

Cost trends

- **Power & fuel costs –** A sharp jump in the power and fuel costs in FY18 was primarily led by an increase in petcoke/coal prices. We factor in a cost increase of 5% in FY19E and FY20E.

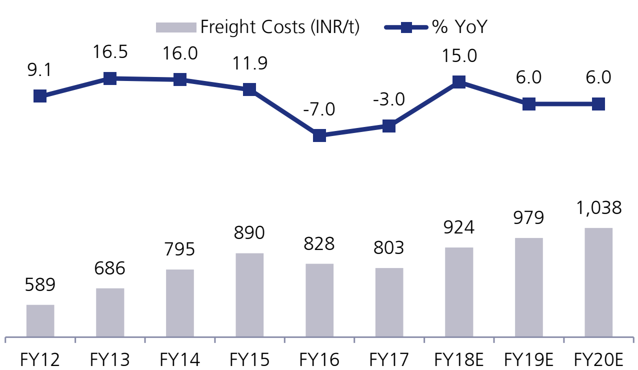
Exhibit 12. Power & fuel cost trends



Source: Company, JM Financial

- **Freight Costs –** A significant rise in freight costs in FY18 took place primarily on account of an increase in diesel prices, leading to a rise in road freight. We factor in a freight increase of 6% in FY19E and FY20E.

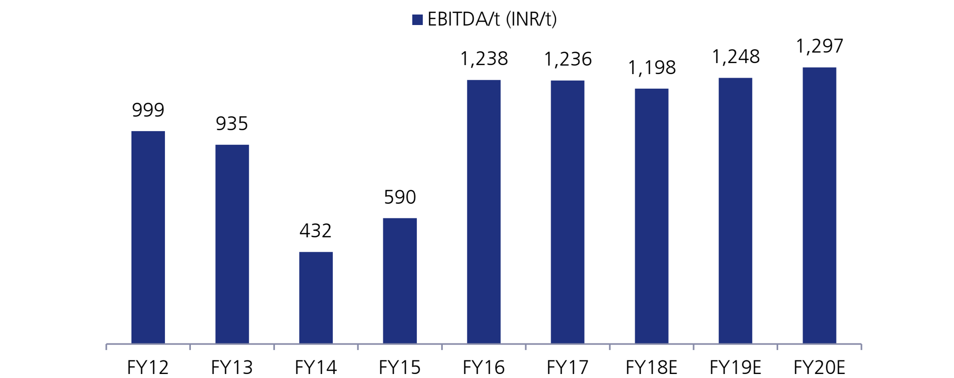
Exhibit 13. Freight cost trends



Source: Company, JM Financial

- **EBITDA/t –** We are factor in EBITDA/t improvement of c.INR 100/t over FY19E-FY20E, respectively.

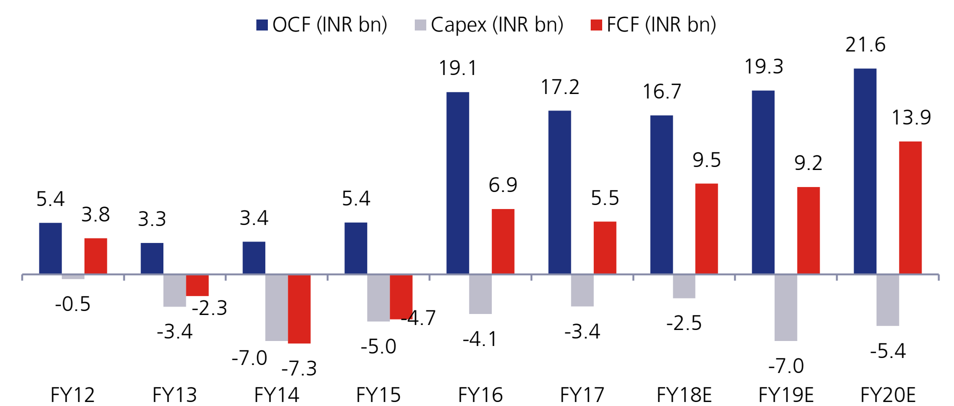
Exhibit 14. EBITDA/t trends



Source: Company, JM Financial

- **Cash flow trends –** The company's operating cash flow should improve over FY18-20E owing to better volumes and an improvement in realisations. Free cash flow of c.INR 23bn over FY19-20E would help reduce its debt significantly.

Exhibit 15. Cash flow trends

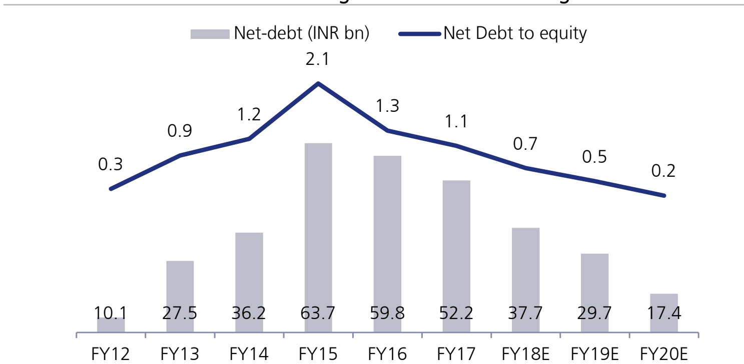


Source: Company, JM Financial

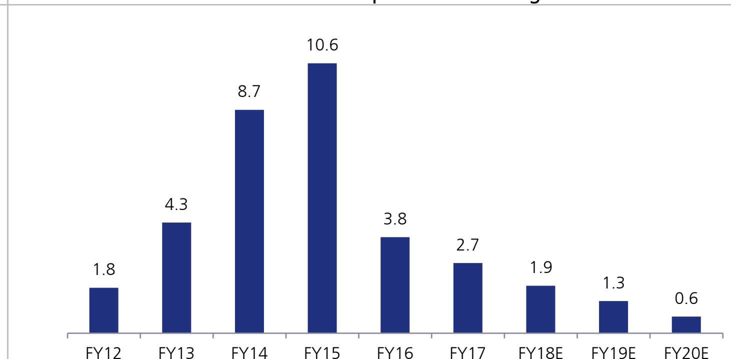
- **Debt trends –** We expect DBL's net debt to decline over FY19-20E on significant free cash flow generation of c.INR 23bn after the capex.

Exhibit 16. Net debt to decline on free cash flow generation of c.INR 23bn over FY19-20E

Net debt to decline on significant free cash flow generation



Net debt/EBITDA to improve on declining net debt

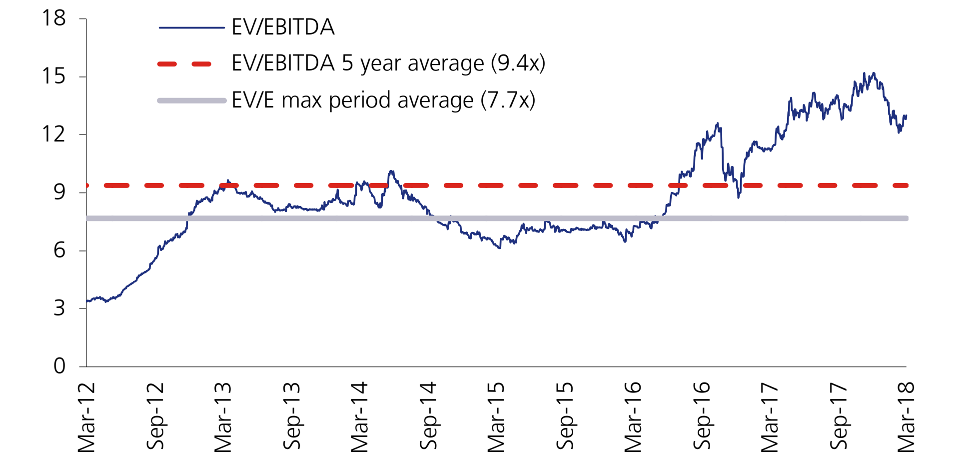


Source: Company, JM Financial

Valuation

- DBL's valuation is on the upswing on account of cost efficiency and growth visibility on lower utilisations. Its five-year average EVE multiple is at 9.4x while the maximum period multiple is at 7.7x.

Exhibit 17. DBL – Discount to the large cap narrowing



Source: Company, JM Financial, Industry

- We value the company by valuing the assets in operation and the option value of incremental expansion potential.
- Assets under operations are being valued at 12x one-year forward EVE, on narrowing of valuation with the large caps.
- The option value of incremental expansion potential has been arrived at assuming execution of the incremental expansion by FY25 and discounted back.
- We arrive at a target price of c.INR 3,420/share for DBL. This implies a one-year forward EVE multiple of 13.2x.

Exhibit 18. Dalmia valuation

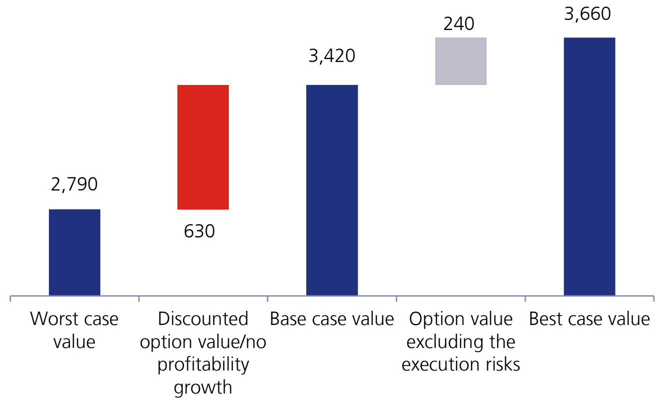
Current assets in operation	
EV (INR mn)	3,22,007
Net Debt (INR mn)	29,735
Valuation (INR mn)	2,92,272
Option value of expansion potential	
Valuation (INR mn)	31,579
Less value of OCL minority	
OCL market cap (INR mn)	75,677
OCL stake	75%
Value attributable to OCL minority (INR mn)	19,177
Total (INR mn)	**3,04,675**
O/s shares	**89**
Per share value (INR)	**3,420**

Source: Company, JM Financial

Scenario analysis:

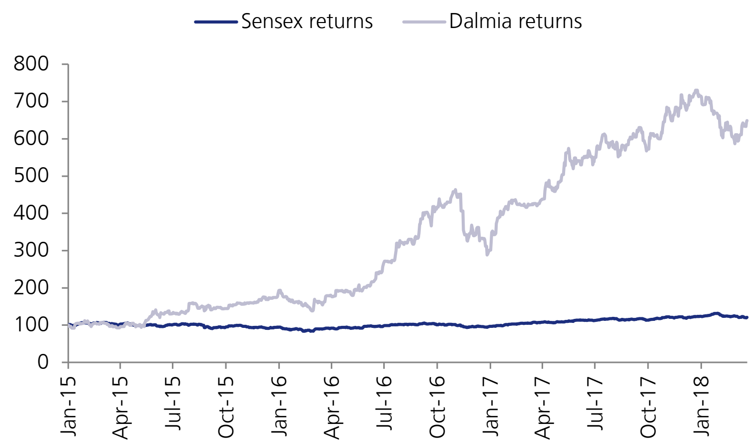
- The worst case scenario entails no growth on profitability and no incremental value from expansion potential, while the best case factors in no execution risks.

Exhibit 19. Scenarios Analysis TP INR3,420



Source: JM Financial

Exhibit 20. Relative returns



	Sensex	Dalmia
1 yr return	13%	53%
3 yr return	18%	577%
5 yr return	77%	1975%

Source: JM Financial, Bloomberg

- Key Risks: **(i)** Any delay in the execution of expansion potential will constrain growth. **(ii)** Any action against cement pricing could have a material impact on the company's profitability. **(iii)** The CCI has been keeping a close watch on the cement industry; any adverse action against cement companies will be sentimentally negative. **(iv)** New players coming into the market (Vicat/Cemex) could impact utilisations. **(v)** A further increase in raw material costs would impact profitability. **(vi)** Any delay in demand recovery would have an impact on the industry as the incremental capacity would remain unabsorbed, forcing players to compete for market share.

Financial Tables (Consolidated)

Income Statement (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Sales	64,113	74,044	84,520	1,00,891	1,15,916
Sales Growth	90.6%	15.5%	14.1%	19.4%	14.9%
Other Operating Income	0	0	0	0	0
Total Revenue	**64,113**	**74,044**	**84,520**	**1,00,891**	**1,15,916**
Cost of Goods Sold/Op. Exp	11,693	13,721	14,964	17,976	20,792
Personnel Cost	5,053	6,092	6,326	7,547	8,682
Other Expenses	31,450	35,212	42,940	51,794	59,608
EBITDA	**15,916**	**19,019**	**20,291**	**23,574**	**26,834**
EBITDA Margin	24.8%	25.7%	24.0%	23.4%	23.1%
EBITDA Growth	164.2%	19.5%	6.7%	16.2%	13.8%
Depn. & Amort.	5,809	6,027	6,698	7,159	7,310
EBIT	10,107	12,992	13,592	16,414	19,524
Other Income	2,295	2,988	2,536	3,027	3,477
Finance Cost	7,302	8,900	7,186	6,159	5,733
PBT before Excep. & Forex	5,100	7,080	8,942	13,282	17,268
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	5,100	7,080	8,942	13,282	17,268
Taxes	2,455	2,762	2,325	3,453	4,490
Extraordinary Inc./Loss(-)	0	0	0	0	0
Assoc. Profit/Min. Int.(-)	745	870	650	941	964
Reported Net Profit	1,900	3,448	5,967	8,888	11,814
Adjusted Net Profit	**1,900**	**3,448**	**5,967**	**8,888**	**11,814**
Net Margin	3.0%	4.7%	7.1%	8.8%	10.2%
Diluted Share Cap. (mn)	88.7	89.0	89.0	89.0	89.0
Diluted EPS (INR)	**21.4**	**38.7**	**67.0**	**99.9**	**132.8**
Diluted EPS Growth	2,488.4%	80.9%	73.0%	49.0%	32.9%
Total Dividend + Tax	190	265	534	0	698
Dividend Per Share (INR)	1.8	2.2	4.8	0.0	6.7

Source: Company, JM Financial

Balance Sheet (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Shareholders' Fund	45,893	49,649	54,764	62,418	72,618
Share Capital	178	178	178	178	178
Reserves & Surplus	45,715	49,471	54,586	62,240	72,440
Preference Share Capital	0	0	0	0	0
Minority Interest	5,259	6,129	6,780	7,721	8,685
Total Loans	87,672	80,402	70,402	60,402	55,402
Def. Tax Liab. / Assets (-)	16,746	15,764	15,764	15,764	15,764
Total - Equity & Liab.	**1,55,570**	**1,51,944**	**1,47,709**	**1,46,304**	**1,52,469**
Net Fixed Assets	1,26,528	1,23,086	1,18,888	1,18,729	1,16,819
Gross Fixed Assets	1,03,175	1,06,785	1,09,285	1,16,285	1,21,685
Intangible Assets	26,947	26,947	26,947	26,947	26,947
Less: Depn. & Amort.	5,949	11,971	18,669	25,829	33,139
Capital WIP	2,355	1,325	1,325	1,325	1,325
Investments	26,665	27,434	21,554	21,554	21,554
Current Assets	26,502	29,258	36,445	37,307	47,316
Inventories	0	0	0	0	0
Sundry Debtors	5,100	5,933	6,947	8,292	9,527
Cash & Bank Balances	2,336	1,750	6,306	4,253	11,587
Loans & Advances	682	1,185	1,185	1,185	1,185
Other Current Assets	18,384	20,391	22,007	23,577	25,018
Current Liab. & Prov.	24,126	27,835	29,177	31,285	33,220
Current Liabilities	9,947	10,937	12,279	14,387	16,322
Provisions & Others	14,179	16,898	16,898	16,898	16,898
Net Current Assets	2,376	1,424	7,267	6,021	14,096
Total – Assets	**1,55,570**	**1,51,944**	**1,47,709**	**1,46,304**	**1,52,469**

Source: Company, JM Financial

Cash Flow Statement (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Profit before Tax	5,100	7,080	8,942	13,282	17,268
Depn. & Amort.	5,809	6,027	6,698	7,159	7,310
Net Interest Exp. / Inc. (-)	7,302	8,900	7,186	6,159	5,733
Inc (-) / Dec in WCap.	3,054	-2,163	-1,288	-807	-741
Others	-1,812	-2,112	-2,536	-3,027	-3,477
Taxes Paid	-304	-555	-2,325	-3,453	-4,490
Operating Cash Flow	**19,149**	**17,176**	**16,678**	**19,313**	**21,603**
Capex	-4,141	-3,366	-2,500	-7,000	-5,400
Free Cash Flow	15,008	13,810	14,178	12,313	16,203
Inc (-) / Dec in Investments	-8,067	1,090	5,880	0	0
Others	-5,024	455	2,536	3,027	3,477
Investing Cash Flow	**-17,232**	**-1,822**	**5,916**	**-3,973**	**-1,923**
Inc / Dec (-) in Capital	11	21	0	0	0
Dividend + Tax thereon	-534	0	-698	-1,040	-1,382
Inc / Dec (-) in Loans	4,129	-6,826	-10,000	-10,000	-5,000
Others	-8,607	-8,727	-7,339	-6,353	-5,965
Financing Cash Flow	**-5,002**	**-15,533**	**-18,037**	**-17,393**	**-12,347**
Inc / Dec (-) in Cash	**-3,085**	**-178**	**4,556**	**-2,053**	**7,334**
Opening Cash Balance	5,420	1,928	1,750	6,306	4,253
Closing Cash Balance	2,336	1,750	6,306	4,253	11,587

Source: Company, JM Financial

Dupont Analysis

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Margin	3.0%	4.7%	7.1%	8.8%	10.2%
Asset Turnover (x)	0.5	0.5	0.6	0.7	0.8
Leverage Factor (x)	3.7	3.2	2.9	2.5	2.2
RoE	5.0%	7.2%	11.4%	15.2%	17.5%

Key Ratios

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
BV/Share (INR)	517.5	557.9	615.4	701.4	816.0
ROIC	5.0%	7.3%	9.5%	11.6%	13.9%
ROE	5.0%	7.2%	11.4%	15.2%	17.5%
Net Debt/Equity (x)	1.9	1.6	1.2	0.9	0.6
P/E (x)	133.4	73.8	42.6	28.6	21.5
P/B (x)	5.5	5.1	4.6	4.1	3.5
EV/EBITDA (x)	21.7	17.8	16.0	13.5	11.4
EV/Sales (x)	5.4	4.6	3.8	3.2	2.6
Debtor days	29	29	30	30	30
Inventory days	0	0	0	0	0
Creditor days	65	63	62	61	61

Source: Company, JM Financial

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JM FINANCIAL

The Ramco Cements | HOLD

Long lead time for upcycle could hamper prospects

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The Ramco Cements Ltd (Ramco) is one of the largest regional cement players in South India with a capacity share of c.10% in the region. The company's performance has been impacted by muted demand, especially in Tamil Nadu (TN), which faced sand mining issues. Ramco is currently expanding its capacity by 3.1MTPA through a mix of greenfield/brownfield grinding units in the South and East. While the capacity expansion gives Ramco access to new geographies, these markets are expected to enter an upcycle only by FY26. We factor in EBITDA CAGR at 20% for FY18-20 on improving volume and margins. We value the company at 10x EVE to arrive at a TP of INR 620/share. We see limited risk/reward in the stock from current levels and therefore maintain our HOLD rating.

- **3.1MTPA expansion in pipeline expected to be commissioned by FY19:** Ramco is undertaking grinding capacity expansion in Andhra Pradesh (AP), West Bengal and Odisha. This includes i) expansion at its Vizag grinding unit from 0.9MTPA to 2MTPA; ii) expansion at the Kolaghat grinding unit from 0.9MTPA to 2MTPA; and iii) set up of a new grinding unit at Odisha with capacity of 0.9MTPA. With this expansion, its overall capacity would stand enhanced from 16.5MTPA to 19.6MTPA. The expansion is slated to be completed in 18 months, at an estimated cost of INR 10.95bn (USD 55/t), to be met through a mix of borrowings and internal accruals. Its 4MTPA split grinding units (2.2MTPA in TN, 0.9MTPA in Kolaghat and 0.9MTPA in Vizag, AP) are operating at 58% capacity.

- **South India to enter upcycle only by 2026:** Ramco is predominantly present in the South India market, which is saturated in terms of cement capacity. With the current capacity utilisation at sub-60% levels and highest expansion potential available in the region, we expect the region to enter an upcycle only by FY26. Additionally, the company is facing the near-term challenge of muted demand on sand shortage in TN (c.65% of the total capacity) as well as increasing pricing pressure. It has begun to expand its footprint in the high-growth East market through a mix of greenfield and brownfield expansions. The Eastern operations will form c.15% of its total capacity after expansion.

- **Balance sheet remains strong:** Ramco has reduced its debt over the last few years from INR 29bn in FY14 to INR 13bn in FY17. We see a strong balance sheet despite expansion in capacity as its net debt-to-EBITDA is expected to remain stable at <1x.

- **Maintain HOLD:** Ramco has historically traded at a 25-35% discount to its large-cap peers. We value the company at 10x one-year forward EVE on account of the growth expected on expansion and its EBITDA/t, which is one of the highest in the industry. We factor in EBITDA/t improvement of INR 140-150/t over the next two years. Capacity utilisation of sub-60% gives the company headroom for growth contingent on volume recovery in the South. We arrive at a target price of INR 620/share (Mar'19) for Ramco. We maintain HOLD as we see limited risk/reward at the current valuation since key markets are expected to face high supply additions and a delayed recovery in profitability.

Recommendation and Price Target	
Current Reco.	HOLD
Previous Reco.	HOLD
Current Price Target (12M)	620
Upside/(Downside)	-21.1%
Previous Price Target	625
Change	-0.8%

Key Data – TRCL IN	
Current Market Price	INR786
Market cap (bn)	INR185.2/US$2.9
Free Float	46%
Shares in issue (mn)	235.6
Diluted share (mn)	235.6
3-mon avg daily val (mn)	INR226.7/US$3.5
52-week range	840/648
Sensex/Nifty	33,627/10,332
INR/US$	65.0

Price Performance

%	1M	6M	12M
Absolute	5.9	11.5	17.0
Relative*	5.0	5.5	4.1

* To the BSE Sensex

Financial Summary					(INR mn)
Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Sales	35,592	39,469	42,834	50,376	61,777
Sales Growth (%)	-1.3	10.9	8.5	17.6	22.6
EBITDA	10,765	11,894	10,870	12,674	16,040
EBITDA Margin (%)	30.1	30.0	25.3	25.1	25.9
Adjusted Net Profit	5,452	6,627	5,714	6,883	9,203
Diluted EPS (INR)	22.9	27.8	24.3	29.2	39.1
Diluted EPS Growth (%)	121.5	21.6	-12.9	20.4	33.7
ROIC (%)	12.6	14.7	12.2	13.3	16.6
ROE (%)	18.9	19.1	14.5	15.7	18.2
P/E (x)	34.3	28.2	32.4	26.9	20.1
P/B (x)	6.0	4.9	4.5	4.0	3.4
EV/EBITDA (x)	19.1	16.7	18.4	15.8	12.0
Dividend Yield (%)	0.4	0.4	0.5	0.6	0.7

Source: Company data, JM Financial. Note: Valuations as of 06/Apr/2018

JM Financial Research is also available on: Bloomberg - JMFR <GO>, Thomson Publisher & Reuters S&P Capital IQ and FactSet

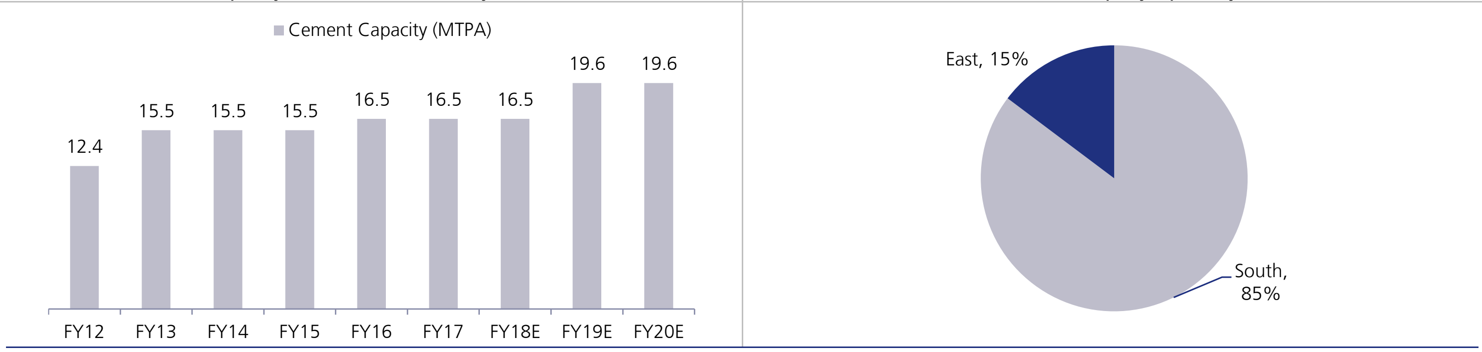
Please see Appendix I at the end of this report for Important Disclosures and Disclaimers and Research Analyst Certification.

Expansion Potential

- Ramco is undertaking a mix of brownfield/greenfield capacity expansion
  - Expansion at its Vizag grinding unit from 1.1MTPA – brownfield
  - Expansion at the Kolaghat grinding unit from 1.1MTPA – brownfield
  - Setting up a new grinding unit at Odisha with capacity of 0.9MTPA – greenfield

Exhibit 1. TRCL - Capacity growth trends and geographical split

Capacity to reach c.20MTPA by FY20E | South is the company's primary market



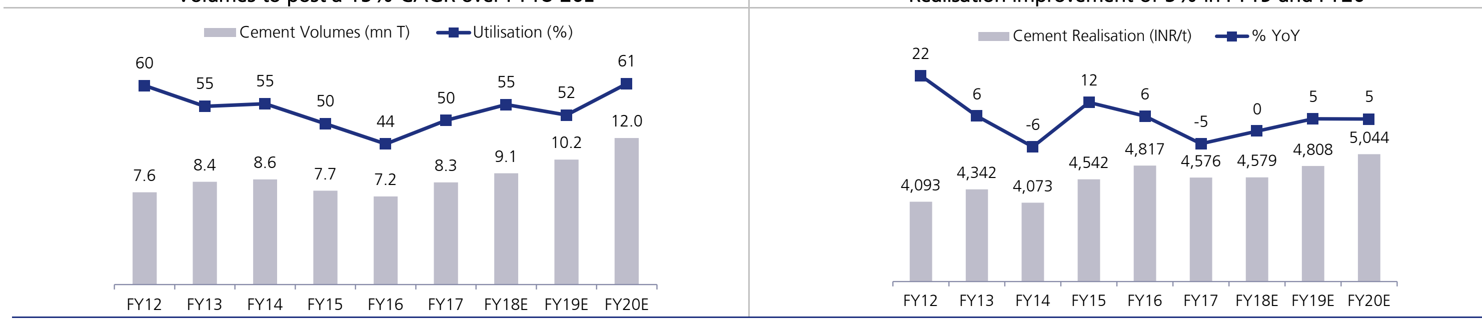
Source: Company, JM Financial

Operating parameters

- **Volume realisation trends –** We expect cement volumes to post a 15% CAGR over FY18-20E. Utilisation levels should improve from 50% in FY17 to c.60% in FY20E. We factor in realisation improvement of 5% in FY19E and FY20E.

Exhibit 2. TRCL – Volume/realisation trends

Volumes to post a 15% CAGR over FY18-20E | Realisation improvement of 5% in FY19 and FY20

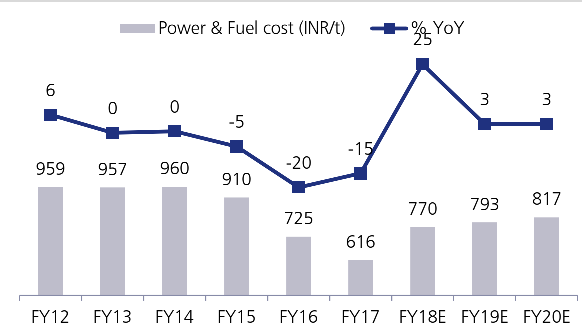


Source: Company, JM Financial

Cost trends

- **Power & fuel costs –** A sharp jump in the power and fuel costs in FY18 was primarily led by an increase in petcoke/coal prices. We factor in a cost increase of 3% in FY19E and FY20E.

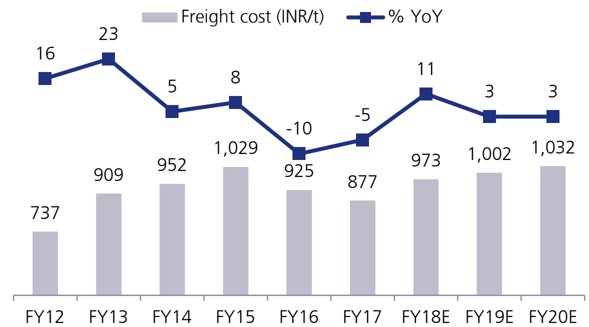
Exhibit 3. Power & fuel cost trends



Source: Company, JM Financial

- **Freight costs –** The significant rise in freight costs in FY18 was primarily led by the increase in diesel prices, driving a rise in road freight. We factor in a freight increase of 3% in FY19E and FY20E.

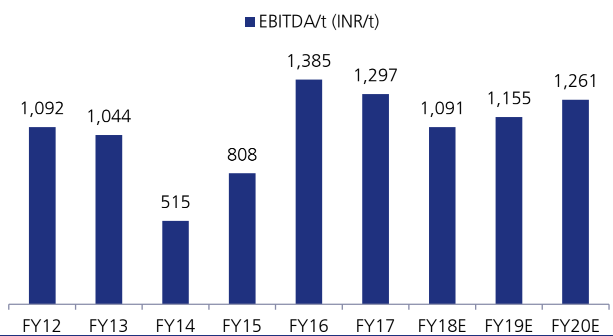
Exhibit 4. Freight cost trends



Source: Company, JM Financial

- **EBITDA/t –** We factor in EBITDA/t improvement of c.INR 50/t and c.INR 90/t in FY19E and FY20E, respectively, on profitability improvement over FY18-20E.

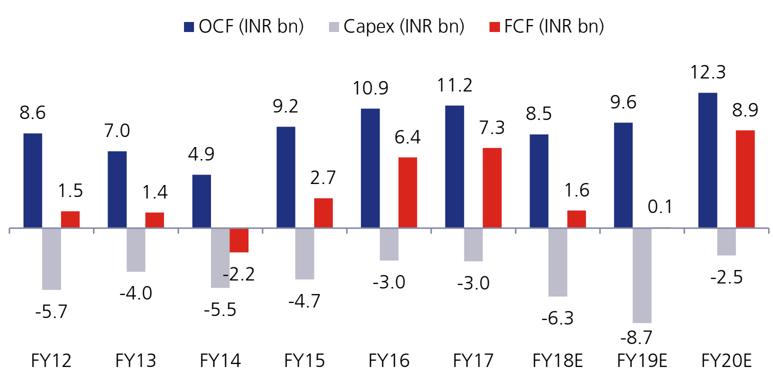
Exhibit 5. EBITDA/t trends



Source: Company, JM Financial

- **Cash flow trends –** Ramco's operating cash flows should improve over FY18-20E on better volumes and realisation improvement and support the company's upcoming capex programme.

Exhibit 6. Cash flow trends

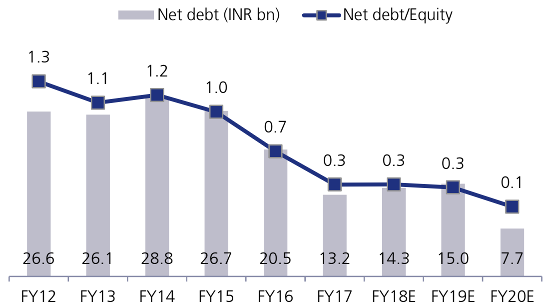


Source: Company, JM Financial

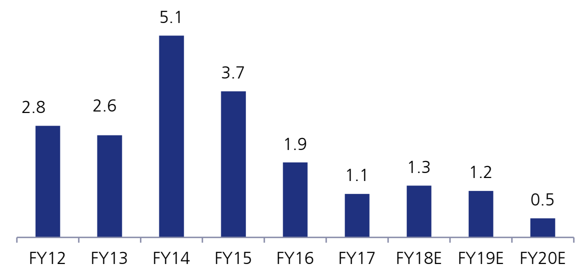
- **Debt trends** – We expect Ramco's net debt to decline over FY18-20E on significant free cash flow generation of c.INR 10.5bn after the capital expenditure.

Exhibit 7. Net debt to decline on free cash flow generation of c.INR10.5bn over FY18-20E

Net debt to decline on significant free cash flow generation



Net debt/EBITDA to improve on declining net debt

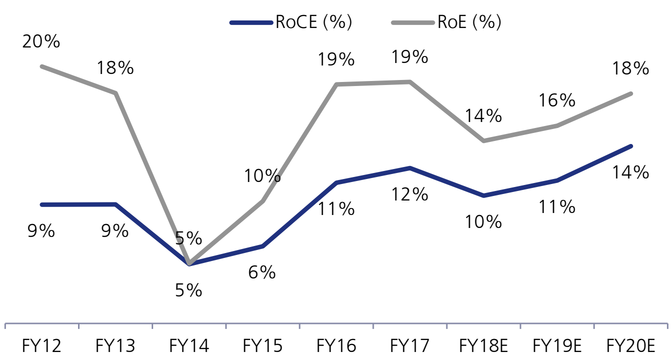


Source: Company, JM Financial

Return profile

- We expect the company's RoE to improve from 14% in FY18E to 18% in FY20E and RoCE to improve from 10% in FY18E to 14% in FY20E.

Exhibit 8. Return profile

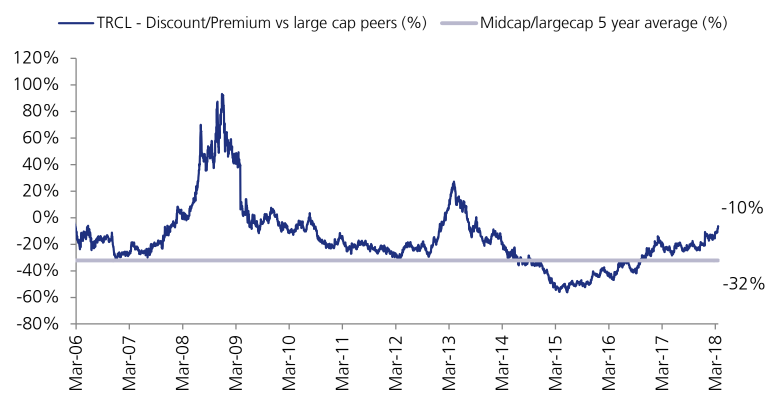


Source: Company, JM Financial

Valuation

- Ramco has historically traded at a 25-35% discount to its large-cap peers. However, the discount has been narrowing since Mar'15 and is currently at 10% vs. large-cap peers. We value Ramco at 10x one-year forward EVE on account of the expansion-driven growth as well as its EBITDA/t, which is one of the highest in the industry. Also, capacity utilisation of sub-60% gives the company headroom for growth contingent on volume recovery in the South. We arrive at a target price of INR 620/share (Mar'19) for Ramco and maintain HOLD.

Exhibit 9. Ramco - trading discount/premium vs. large cap peers

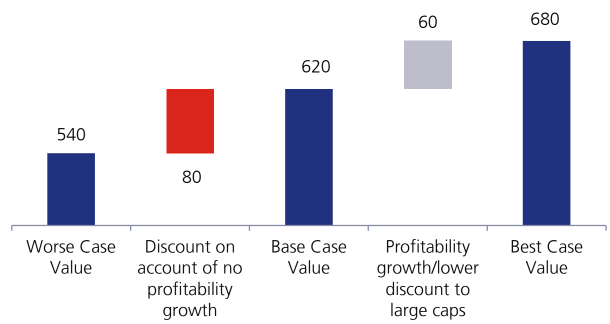


Source: Company, JM Financial, Bloomberg

Scenario analysis:

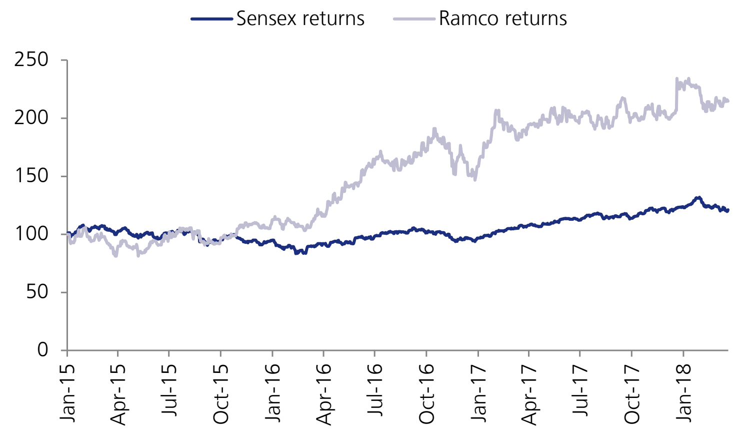
- For the worst case, we factor in a zero profitability growth scenario, while for the best case, we assume the stock valuation at a lower discount to large caps vs. the base case.

Exhibit 10. Scenarios analysis



Source: JM Financial

Exhibit 11. Relative returns



	Sensex	Ramco
1 yr return	13%	13%
3 yr return	18%	142%
5 yr return	77%	207%

Source: JM Financial, Bloomberg

- Key Risks: (i) Cement demand in TN has been experiencing a lull on account of the sand mining ban in the state; speedy resolution of the issue is critical for demand recovery and any delay would continue to impact the company's demand/volumes. (ii) Cement prices in the South have been declining on muted demand; a continued downward trend will impact the profitability of cement companies in the region. (iii) Any action against cement pricing could have a material impact on the company's profitability. (iv) The CCI has been keeping a close watch on the cement industry and any adverse action against cement companies will be sentimentally negative. (v) New players entering the market (Vicat/Cemex) could impact utilisations. (vi) Any further increase in raw material costs would impact profitability.

Financial Tables (Consolidated)

Income Statement (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Sales	35,592	39,469	42,834	50,376	61,777
Sales Growth	-1.3%	10.9%	8.5%	17.6%	22.6%
Other Operating Income	226	204	214	126	154
Total Revenue	**35,818**	**39,673**	**43,049**	**50,502**	**61,932**
Cost of Goods Sold/Op. Exp	5,543	6,466	7,227	8,986	11,123
Personnel Cost	2,594	2,785	3,081	3,560	4,298
Other Expenses	16,916	18,528	21,870	25,282	30,471
EBITDA	**10,765**	**11,894**	**10,870**	**12,674**	**16,040**
EBITDA Margin	30.1%	30.0%	25.3%	25.1%	25.9%
EBITDA Growth	49.5%	10.5%	-8.6%	16.6%	26.6%
Depn. & Amort.	3,053	2,669	2,903	3,050	3,327
EBIT	7,712	9,226	7,967	9,624	12,714
Other Income	755	392	240	290	340
Finance Cost	1,838	1,049	682	851	938
PBT before Excep. & Forex	6,629	8,569	7,525	9,063	12,116
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	6,629	8,569	7,525	9,063	12,116
Taxes	1,317	2,027	1,806	2,175	2,908
Extraordinary Inc./Loss(-)	0	0	124	0	0
Assoc. Profit/Min. Int.(-)	142	110	5	5	5
Reported Net Profit	5,452	6,627	5,838	6,883	9,203
Adjusted Net Profit	**5,452**	**6,627**	**5,714**	**6,883**	**9,203**
Net Margin	15.2%	16.7%	13.3%	13.6%	14.9%
Diluted Share Cap. (mn)	238.1	238.1	235.6	235.6	235.6
Diluted EPS (INR)	**22.9**	**27.8**	**24.3**	**29.2**	**39.1**
Diluted EPS Growth	121.5%	21.6%	-12.9%	20.4%	33.7%
Total Dividend + Tax	858	860	1,053	1,241	1,659
Dividend Per Share (INR)	3.0	3.0	3.7	4.4	5.9

Source: Company, JM Financial

Balance Sheet (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Shareholders' Fund	31,331	37,955	41,063	46,705	54,249
Share Capital	238	238	236	236	236
Reserves & Surplus	31,093	37,717	40,828	46,469	54,013
Preference Share Capital	0	0	0	0	0
Minority Interest	7	19	24	29	34
Total Loans	21,404	14,372	15,372	15,372	10,372
Def. Tax Liab. / Assets (-)	7,084	7,215	7,215	7,215	7,215
Total - Equity & Liab.	**59,826**	**59,561**	**63,674**	**69,321**	**71,870**
Net Fixed Assets	51,731	51,851	55,206	60,348	59,521
Gross Fixed Assets	76,623	79,350	85,608	93,800	96,300
Intangible Assets	0	0	0	0	0
Less: Depn. & Amort.	26,360	28,701	31,604	34,654	37,981
Capital WIP	1,468	1,203	1,203	1,203	1,203
Investments	3,267	3,562	3,562	3,562	3,562
Current Assets	14,445	15,292	16,369	18,388	24,701
Inventories	5,502	5,766	6,257	7,359	9,024
Sundry Debtors	4,721	5,549	6,022	7,082	8,685
Cash & Bank Balances	911	1,198	1,073	400	2,641
Loans & Advances	345	422	458	539	661
Other Current Assets	2,966	2,357	2,558	3,008	3,689
Current Liab. & Prov.	9,617	11,145	11,463	12,978	15,915
Current Liabilities	2,148	2,562	2,781	3,270	4,010
Provisions & Others	7,469	8,582	8,682	9,707	11,904
Net Current Assets	4,828	4,147	4,906	5,411	8,786
Total – Assets	**59,826**	**59,561**	**63,674**	**69,321**	**71,870**

Source: Company, JM Financial

Cash Flow Statement (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Profit before Tax	6,629	8,569	7,525	9,063	12,116
Depn. & Amort.	3,253	2,858	2,903	3,050	3,327
Net Interest Exp. / Inc. (-)	1,838	1,049	682	851	938
Inc (-) / Dec in WCap.	919	816	-883	-1,179	-1,134
Others	-267	-245	124	0	0
Taxes Paid	-1,484	-1,874	-1,806	-2,175	-2,908
Operating Cash Flow	**10,888**	**11,174**	**8,545**	**9,610**	**12,338**
Capex	-2,980	-3,048	-6,258	-8,192	-2,500
Free Cash Flow	7,908	8,126	2,287	1,419	9,838
Inc (-) / Dec in Investments	198	-30	0	0	0
Others	176	276	0	0	0
Investing Cash Flow	**-2,606**	**-2,802**	**-6,258**	**-8,192**	**-2,500**
Inc / Dec (-) in Capital	0	0	-1,677	0	0
Dividend + Tax thereon	-1,291	0	-1,053	-1,241	-1,659
Inc / Dec (-) in Loans	-6,566	-5,545	1,000	0	-5,000
Others	-142	-2,541	-682	-851	-938
Financing Cash Flow	**-8,000**	**-8,086**	**-2,411**	**-2,092**	**-7,597**
Inc / Dec (-) in Cash	**282**	**286**	**-125**	**-673**	**2,241**
Opening Cash Balance	629	911	1,198	1,073	400
Closing Cash Balance	911	1,198	1,073	400	2,641

Source: Company, JM Financial

Dupont Analysis

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Margin	15.2%	16.7%	13.3%	13.6%	14.9%
Asset Turnover (x)	0.6	0.7	0.7	0.8	0.9
Leverage Factor (x)	2.1	1.7	1.6	1.5	1.4
RoE	18.9%	19.1%	14.5%	15.7%	18.2%

Key Ratios

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
BV/Share (INR)	131.6	159.4	174.3	198.3	230.3
ROIC	12.6%	14.7%	12.2%	13.3%	16.6%
ROE	18.9%	19.1%	14.5%	15.7%	18.2%
Net Debt/Equity (x)	0.7	0.3	0.3	0.3	0.1
P/E (x)	34.3	28.2	32.4	26.9	20.1
P/B (x)	6.0	4.9	4.5	4.0	3.4
EV/EBITDA (x)	19.1	16.7	18.4	15.8	12.0
EV/Sales (x)	5.8	5.0	4.6	4.0	3.1
Debtor days	48	51	51	51	51
Inventory days	56	53	53	53	53
Creditor days	31	34	32	32	32

Source: Company, JM Financial

JK Cement | BUY

Enters the next phase of capacity addition; white segment stable

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JK Cement's 4.2MTPA expansion pipeline is slated to give the company exposure to the Central and Western India. With the capacity expected to come on stream by FY20, the company is well-positioned to tap demand recovery as Central, Western and Northern regions are expected to enter an upcycle in FY23. Further, the white cement segment has been boosting earnings on account of better margins and lower competition (JK Cement is one of the key players in the segment). The company's debt is expected to rise by INR 12bn-13bn on account of capital expenditure. We value the grey cement segment at 8x and white cement segment at 9x EVE to arrive at a TP of INR 1,120. We maintain BUY.

- **4.2MTPA expansion in the pipeline; a key growth driver:** JK Cement is currently setting up 4.2MTPA of capacity across North, Central and West India. The company is setting up a grinding mill at Mangrol with 1MTPA grinding capacity along with 2.5MTPA of clinker, 1 MTPA of expansion through debottlenecking in Nimbahera plant, 1.5MTPA of greenfield grinding unit in Aligarh and 0.7MTPA of greenfield grinding unit in Gujarat. It is expected to incur capex of INR 20bn to set up the capacities at c.USD 70/t, a significant discount to the industry norm. With the capacities expected to come on stream by FY20, JK Cement is well-placed to tap demand growth. The company would also benefit from the cement upcycle, expected to begin in FY23.

- **White cement to provide stability and growth to earnings:** The white cement segment commands higher realisations and has better operating margins than grey cement. The white cement segment has grown steadily with EBITDA contribution at 46% in 9MFY18. Management indicated a sustainable EBITDA margin of 30% with growth of 12-15% annually for the white cement segment (c.28% EBITDA margin in 9MFY18). JK Cement is the only major player (besides Ultratech) in this segment. Going forward, we expect contribution from the segment to rise on improving growth prospects.

- **Net debt-to-EBITDA to decline on better operational metrics:** JK Cement is expected to raise INR 12bn-13bn to fund the upcoming capex (likely to be INR 20bn). The company is expected to generate operating free cash flow of INR 19bn over FY19-20E to support the capex planned over the period. With a ramp up in existing operations and growth in the white cement segment, its net debt-to-EBITDA is expected to continue to decline.

- **Maintain BUY:** JK Cement has historically traded at a 40% discount to its large-cap peers. We value the grey cement segment at 8x one-year forward EVE as we factor in the historical discount continuing. We value the white cement segment at 9x one-year forward EVE on account of its growth potential and oligopoly in the market. We arrive at a target price of INR 1,120/share for JK Cement (Mar'19) and maintain a BUY rating on the stock. Improvement in operations going forward - especially after commissioning of new capacities - could lower the discount to large-caps.

Recommendation and Price Target	
Current Reco.	BUY
Previous Reco.	BUY
Current Price Target (12M)	1,120
Upside/(Downside)	14.6%
Previous Price Target	1,170
Change	-4.3%

Key Data – JKCE IN	
Current Market Price	INR977
Market cap (bn)	INR68.3/US$1.1
Free Float	35%
Shares in issue (mn)	69.9
Diluted share (mn)	69.9
3-mon avg daily val (mn)	INR48.2/US$0.7
52-week range	1,196/892
Sensex/Nifty	33,627/10,332
INR/US$	65.0

Price Performance

%	1M	6M	12M
Absolute	-3.2	0.6	5.3
Relative*	-4.1	-4.9	-6.2

* To the BSE Sensex

Financial Summary (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Sales	35,212	37,036	44,319	51,272	60,056
Sales Growth (%)	5.5	5.2	19.7	15.7	17.1
EBITDA	5,199	7,343	7,882	9,526	11,919
EBITDA Margin (%)	14.6	19.3	17.8	18.6	19.8
Adjusted Net Profit	645	2,789	3,508	4,221	5,947
Diluted EPS (INR)	9.2	39.9	50.2	60.4	85.0
Diluted EPS Growth (%)	-58.9	332.3	25.8	20.3	40.9
ROIC (%)	4.6	12.6	12.9	13.4	14.6
ROE (%)	3.9	15.4	17.1	17.9	21.5
P/E (x)	105.9	24.5	19.5	16.2	11.5
P/B (x)	4.0	3.6	3.1	2.7	2.3
EV/EBITDA (x)	17.4	12.3	11.1	9.5	7.8
Dividend Yield (%)	0.4	0.4	1.1	1.0	1.4

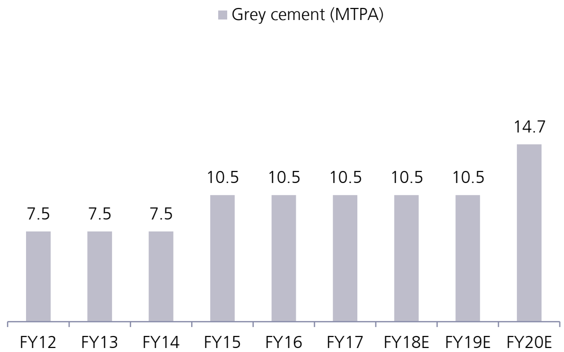
Source: Company data, JM Financial. Note: Valuations as of 06/Apr/2018

Capacity Expansion and Utilisation ramp-up

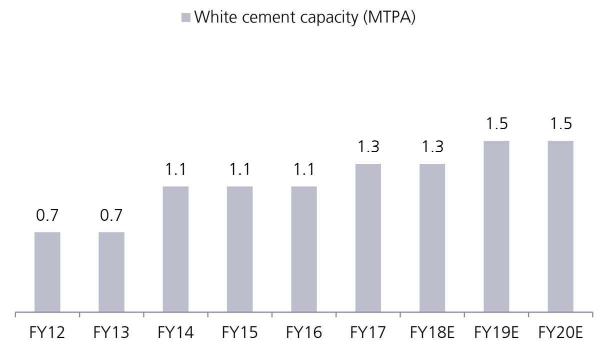
- Grey Cement - JK Cement has announced a mix of brownfield/greenfield expansion
  - 1MTPA grinding mill installations at Mangrol Rajasthan; 2.5MTPA (7,500TPD) of clinker kiln - Brownfield
  - 1MTPA grinding expansion through mill upgrading in Nimbahera - Brownfield
  - 1.5MTPA grinding unit in Western UP – Greenfield
  - 0.7MTPA grinding unit in Gujarat – Greenfield
- White cement – JK Cement is in the process of expanding its white putty capacity by 0.2MTPA to 0.9MTPA.

Exhibit 1. JKCE - Capacity growth trends

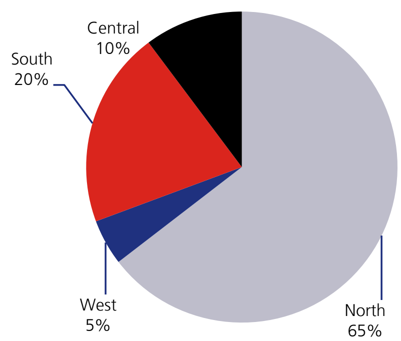
Grey Cement – Capacity set to double over FY14-20E



White Cement – Capacity set to double over FY13-19



Grey cement segment – post-expansion region-wise split



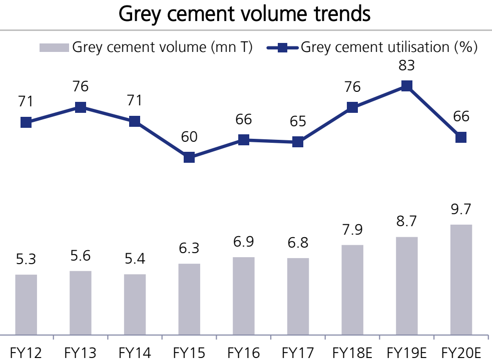
Source: Company, JM Financial

Operating parameters

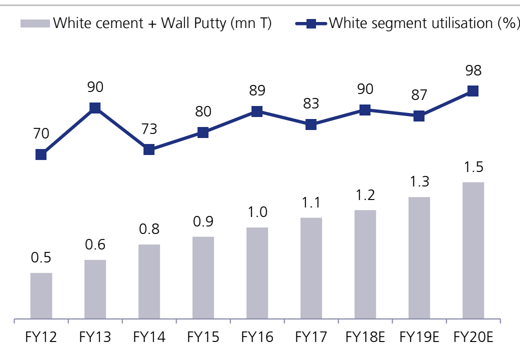
- Volume trends – We expect grey cement volumes to post c.11% CAGR over FY18-20E, while for the white cement segment, we estimate volume CAGR of 12% over the same period.

Exhibit 2. Volume/Utilisation trends

Grey cement volume trends



White cement volume trends

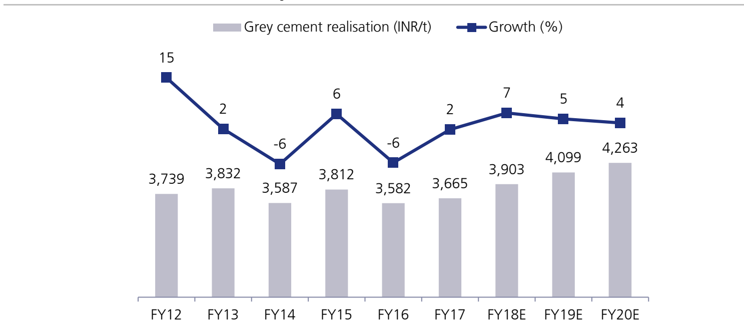


Source: Company, JM Financial

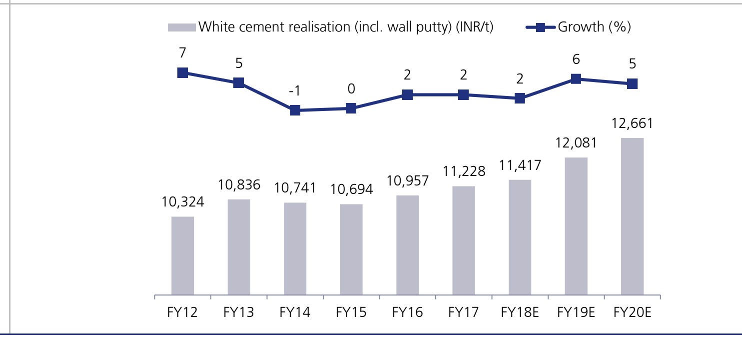
- **Realisation trends –** We factor in a blended realisation improvement of 4-5% per annum over FY18-20E.

Exhibit 3. JKCE – EBITDA/t trends

Grey cement realisation trends



White cement realisation trends



Source: Company, JM Financial

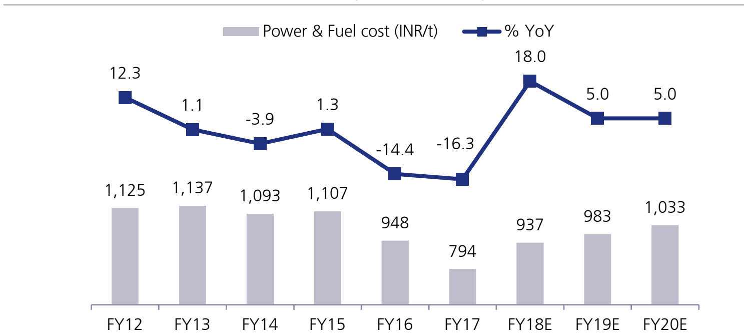
- **Cost factors –**

  - **Power and fuel costs** have been increasing for the company on account of higher petcoke/coal prices. Additionally, the ban on the use of petcoke in power plants is expected to drive costs higher.

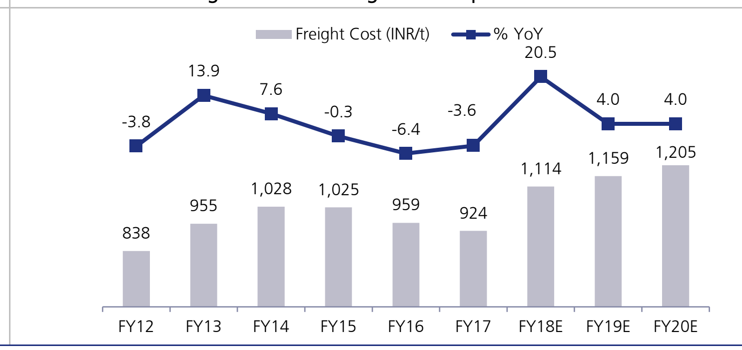
  - **Freight costs** have been rising owing to the increase in diesel prices. Furthermore, the levy of the busy season surcharge by railways adversely impacts freight costs.

Exhibit 4. JKCE – Cost escalations on increasing commodity prices

Power & Fuel cost increasing on escalating petcoke/coal prices



Freight cost increasing on diesel price escalations

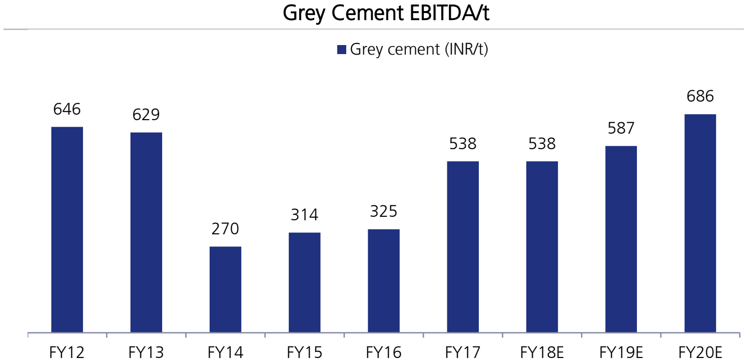


Source: Company, JM Financial

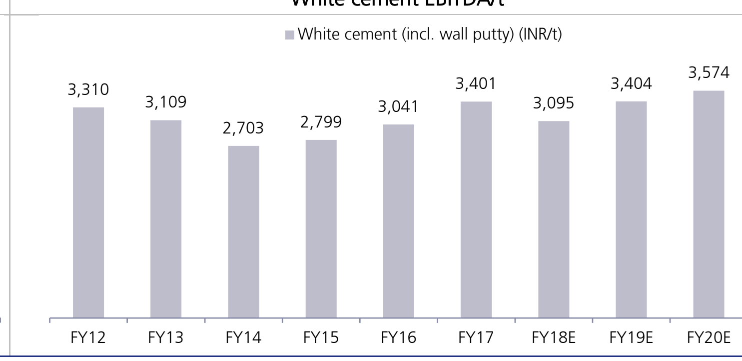
- **EBITDA & EBITDA/t trends –** We factor in EBITDA/t improvement of c.INR 150/t over FY19-20E in the grey cement segment on the back of realisations improvement. We factor in EBITDA/t improvement of 7% over FY18-20E for the white cement segment.

Exhibit 5. JKCE – EBITDA/t trends

Grey Cement EBITDA/t



White cement EBITDA/t

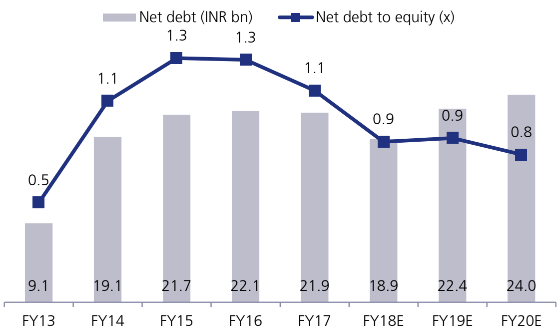


Source: Company, JM Financial

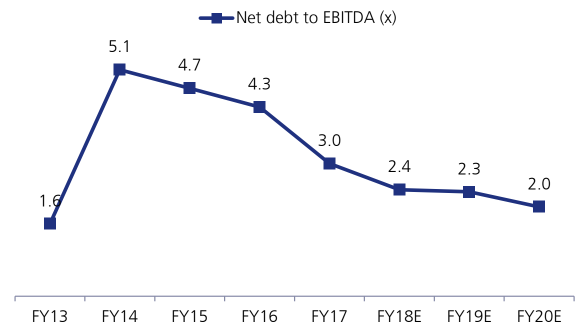
- **Debt trends** – We expect the company's net debt to rise over FY19-20E on account of expansion in the pipeline. The company is in the process of setting up 4.2MTPA of grey cement capacity by FY20, incurring capex of INR 20bn (INR 12bn-13bn through debt and the remaining through internal accruals). Its net debt-to-EBITDA should improve owing to the capacity ramp-up over FY17-20E.

Exhibit 6. JKCE – Debt trends

Debt to increase on capacity expansion



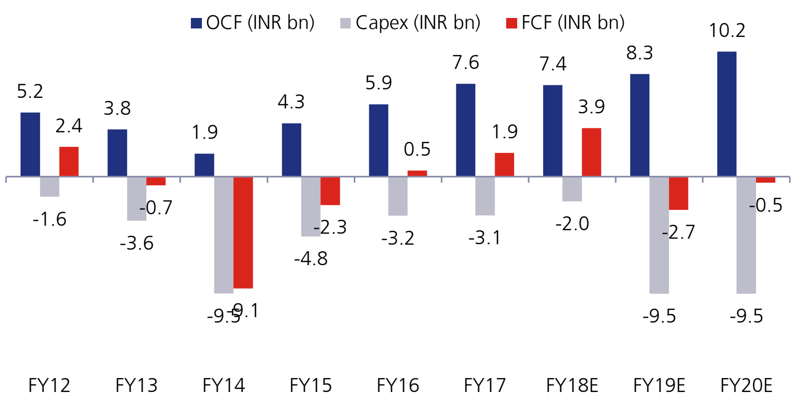
Net debt-to-EBITDA to improve on capacity ramp-up



Source: Company, JM Financial

- **Cash Flow trends** – We factor in operating cash flow of INR 19bn over FY19-20E on a ramp up in capacity and improvement in profitability. The company plans to set up capacity of 4.2MTPA by FY20E, incurring capex of INR 20bn.

Exhibit 7. Cash flow trends

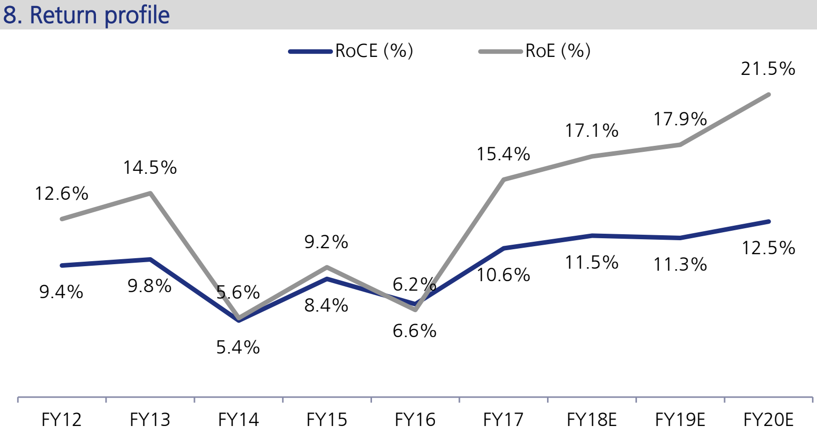


Source: Company, JM Financial

Return profile

- We expect JK Cement's return profile to improve on improving profitability. We expect RoE to improve from 15.4% in FY17 to 21.5% in FY20 and RoCE to improve from 10.6% in FY17 to 12.5% in FY20E.

Exhibit 8. Return profile

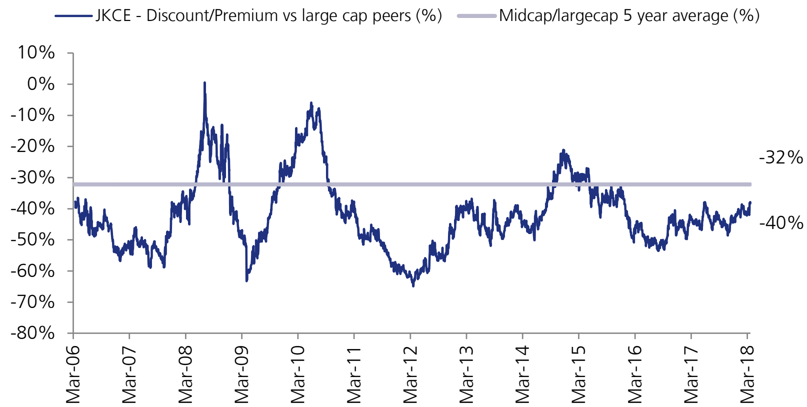


Source: Company, JM Financial

Valuation

- JK Cement has historically traded at a 32% discount to its large-cap peers. We value the grey cement segment at 8x one-year forward EVE (33% discount to large-cap multiple). For the white cement segment, considering its growth potential and the oligopoly market, we value the business at 9x one-year forward EVE. We arrive at a target price of INR 1120/share for JK Cement (Mar'19) and maintain BUY.

Exhibit 9. JKCE trading discount/premium vs. large-cap peers

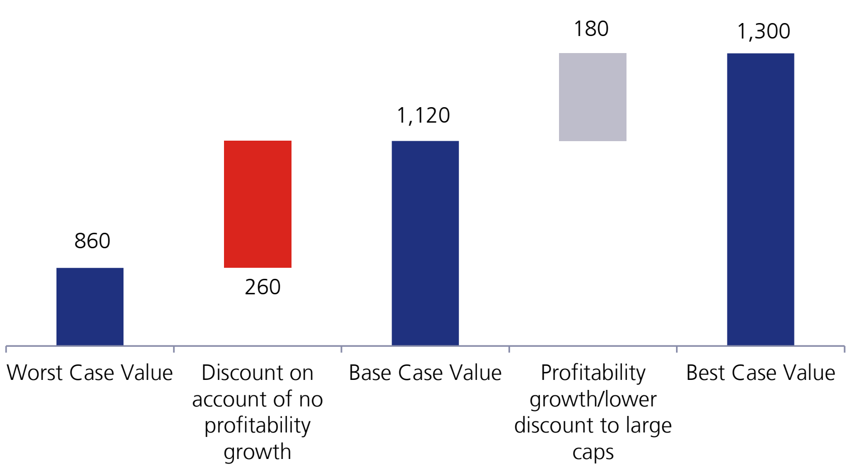


Source: Company, JM Financial, Bloomberg

Scenario analysis:

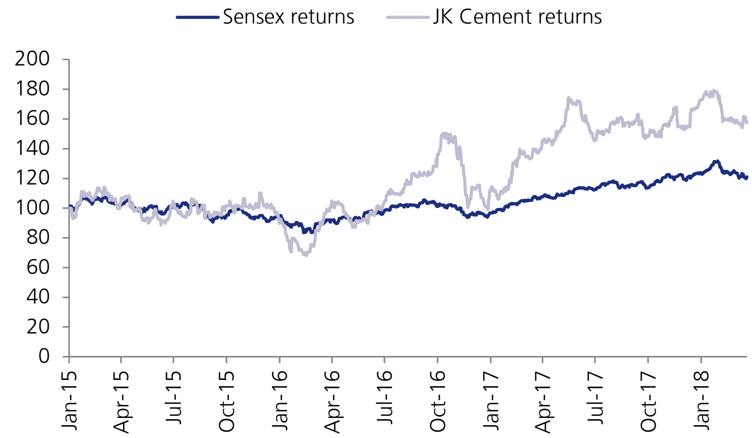
- For the worst case, we factor in a zero profitability growth scenario, while for the best case, we assume the stock valuation at a lower discount vs. the base case.

Exhibit 10. Scenarios analysis



Source: JM Financial

Exhibit 11. Relative returns



	Sensex	JK Cement
1 yr return	13%	14%
3 yr return	18%	48%
5 yr return	77%	285%

Source: JM Financial, Bloomberg

- Key Risks: (i) The company is in the process of expanding capacity by 4.2MTPA (40% of the current capacity) and is expected to raise debt of INR 12bn-13bn for this; its balance sheet may see stress if the growth does not come through as planned. (ii) Any action against cement pricing could have a material impact on the company's profitability. (iii) CCI has been keeping a close watch on the cement industry and any adverse action against cement companies would be sentimentally negative. (iv) New players entering the market (Vicat/Cemex) could impact utilisations. (v) A further increase in raw material prices could impact profitability.

Financial Tables (Standalone)

Income Statement (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Sales	35,212	37,036	44,319	51,272	60,056
Sales Growth	5.5%	5.2%	19.7%	15.7%	17.1%
Other Operating Income	342	929	0	0	0
Total Revenue	**35,554**	**37,964**	**44,319**	**51,272**	**60,056**
Cost of Goods Sold/Op. Exp	6,741	6,923	7,853	8,594	9,665
Personnel Cost	2,349	2,755	3,154	3,622	4,276
Other Expenses	21,266	20,944	25,430	29,530	34,196
EBITDA	**5,199**	**7,343**	**7,882**	**9,526**	**11,919**
EBITDA Margin	14.6%	19.3%	17.8%	18.6%	19.8%
EBITDA Growth	12.1%	41.2%	7.3%	20.8%	25.1%
Depn. & Amort.	1,641	1,761	1,885	1,967	2,282
EBIT	3,558	5,582	5,997	7,558	9,637
Other Income	571	512	1,010	659	720
Finance Cost	2,707	2,656	2,510	2,188	1,862
PBT before Excep. & Forex	1,421	3,437	4,497	6,030	8,496
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	1,421	3,437	4,497	6,030	8,496
Taxes	776	649	989	1,809	2,549
Extraordinary Inc./Loss(-)	0	193	0	0	0
Assoc. Profit/Min. Int.(-)	0	0	0	0	0
Reported Net Profit	645	2,982	3,508	4,221	5,947
Adjusted Net Profit	**645**	**2,789**	**3,508**	**4,221**	**5,947**
Net Margin	1.8%	7.3%	7.9%	8.2%	9.9%
Diluted Share Cap. (mn)	69.9	69.9	69.9	69.9	69.9
Diluted EPS (INR)	**9.2**	**39.9**	**50.2**	**60.4**	**85.0**
Diluted EPS Growth	-58.9%	332.3%	25.8%	20.3%	40.9%
Total Dividend + Tax	337	337	903	790	1,113
Dividend Per Share (INR)	4.0	4.0	11.0	9.7	13.6

Source: Company, JM Financial

Balance Sheet (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Shareholders' Fund	16,903	19,203	21,808	25,239	30,073
Share Capital	699	699	699	699	699
Reserves & Surplus	16,204	18,504	21,109	24,539	29,373
Preference Share Capital	0	0	0	0	0
Minority Interest	0	0	0	0	0
Total Loans	26,427	26,774	23,274	27,074	29,574
Def. Tax Liab. / Assets (-)	2,165	2,140	2,140	2,140	2,140
Total - Equity & Liab.	**45,495**	**48,117**	**47,222**	**54,453**	**61,787**
Net Fixed Assets	36,750	37,849	37,963	45,496	52,714
Gross Fixed Assets	45,862	48,936	50,936	53,294	67,603
Intangible Assets	0	0	0	0	0
Less: Depn. & Amort.	10,636	12,136	14,021	15,988	18,270
Capital WIP	1,524	1,048	1,048	8,191	3,381
Investments	4,366	5,356	5,356	5,356	5,356
Current Assets	14,522	15,144	16,071	17,617	20,069
Inventories	4,289	4,981	6,071	7,024	8,227
Sundry Debtors	1,657	1,481	1,773	2,051	2,402
Cash & Bank Balances	3,673	4,179	3,724	4,040	4,937
Loans & Advances	0	0	0	0	0
Other Current Assets	4,902	4,503	4,503	4,503	4,503
Current Liab. & Prov.	10,143	10,231	12,168	14,017	16,353
Current Liabilities	2,806	2,052	3,988	5,837	8,173
Provisions & Others	7,336	8,180	8,180	8,180	8,180
Net Current Assets	4,379	4,912	3,903	3,601	3,717
Total – Assets	**45,495**	**48,117**	**47,222**	**54,453**	**61,787**

Source: Company, JM Financial

Cash Flow Statement (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Profit before Tax	1,421	3,244	4,497	6,030	8,496
Depn. & Amort.	1,641	1,761	1,885	1,967	2,282
Net Interest Exp. / Inc. (-)	2,672	2,676	2,510	2,188	1,862
Inc (-) / Dec in WCap.	1,097	1,079	555	618	781
Others	-639	-607	-1,010	-659	-720
Taxes Paid	-306	-603	-989	-1,809	-2,549
Operating Cash Flow	**5,887**	**7,551**	**7,448**	**8,335**	**10,151**
Capex	-3,163	-3,131	-2,000	-9,500	-9,500
Free Cash Flow	2,724	4,420	5,448	-1,165	651
Inc (-) / Dec in Investments	-1,156	-966	0	0	0
Others	422	210	1,010	659	720
Investing Cash Flow	**-3,897**	**-3,887**	**-990**	**-8,841**	**-8,780**
Inc / Dec (-) in Capital	0	0	0	0	0
Dividend + Tax thereon	-337	-337	-903	-790	-1,113
Inc / Dec (-) in Loans	832	-130	-3,500	3,800	2,500
Others	-2,647	-2,692	-2,510	-2,188	-1,862
Financing Cash Flow	**-2,152**	**-3,159**	**-6,913**	**822**	**-475**
Inc / Dec (-) in Cash	**-162**	**505**	**-455**	**316**	**897**
Opening Cash Balance	4,077	3,673	4,179	3,724	4,040
Closing Cash Balance	3,915	4,179	3,724	4,040	4,937

Source: Company, JM Financial

Dupont Analysis

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Margin	1.8%	7.3%	7.9%	8.2%	9.9%
Asset Turnover (x)	0.8	0.8	0.9	1.0	1.0
Leverage Factor (x)	2.7	2.6	2.3	2.2	2.1
RoE	3.9%	15.4%	17.1%	17.9%	21.5%

Key Ratios

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
BV/Share (INR)	241.7	274.6	311.9	360.9	430.1
ROIC	4.6%	12.6%	12.9%	13.4%	14.6%
ROE	3.9%	15.4%	17.1%	17.9%	21.5%
Net Debt/Equity (x)	1.3	1.1	0.9	0.9	0.8
P/E (x)	105.9	24.5	19.5	16.2	11.5
P/B (x)	4.0	3.6	3.1	2.7	2.3
EV/EBITDA (x)	17.4	12.3	11.1	9.5	7.8
EV/Sales (x)	2.5	2.4	2.0	1.8	1.5
Debtor days	17	14	15	15	15
Inventory days	44	48	50	50	50
Creditor days	34	24	40	51	62

Source: Company, JM Financial

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JK Lakshmi Cement | BUY

Operational efficiency a competitive advantage

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JK Lakshmi (JKL) has doubled its capacity from 5.3MTPA to 10.7MTPA in 3 years and this is expected to rise to 11.3MTPA by FY19. Additionally, the company has 1.5MTPA capacity through Udaipur Cement Works. Sub-70% utilisation gives JKL significant headroom for growth. JKL should benefit from its exposure in North and West India, which are expected to enter an upcycle by FY23-24. In addition, commissioning of WHR (7.5MW) and CPP (20MW) in the East is expected to result in cost savings of INR 50-60/t going forward. We expect free cash flow generation of INR 13bn over FY19-20E as well as cost saving measures to internally fund its expansion plans. Additionally, management indicated that expansion potential of 6MTPA across its existing operations would help it tap demand growth. We value the company at 10x EVE. We have a TP of INR 510 and maintain BUY.

- **Volumes expected to post 8% CAGR over FY17-20E:** JKL has doubled its capacity from 5.3MTPA to 10.7MTPA since FY14, and this is expected to go up to c.11.3MTPA by FY19. Capacity utilisation of sub-70% gives JKL significant headroom to grow. Additionally, the company has 6MTPA of expansion potential across its existing plants. On the back of this, we expect volumes to record c.8% CAGR over FY17-20E (ex-Udaipur).

- **One of the most cost-efficient players:** JKL's cost efficiency parameters are comparable with the best in the industry. With consistent improvement in performance on energy efficiency, the company now boasts of one of the lowest energy consumption parameters in the country for cement production. Additionally, the company's overheads structure is one of leanest in the sector, providing an edge over competitors. JKL has commissioned 7.5MW of WHR and is in the process of commissioning 20MW through a captive power plant by FY19 at its facility in the East (25% of total capacity). Management expects costs saving of INR 180-200/t from these projects, translating into an impact of INR 50-60/t on reported EBITDA/t.

- **Significant free cash flow generation of INR 7.5bn over FY19-20E:** Although JKL's balance sheet is levered currently (net debt-to-EBITDA of 3.3x), we expect it to improve going forward on significant operating cash flow generation of INR 7.5bn over FY19-20E and limited capex going forward (0.6MTPA grinding unit is the only major capex). We expect its net debt-to-EBITDA to decline to 1.3x by FY20E.

- **Maintain BUY:** JKL has historically traded at a 20-30% discount to its large-cap peers. It is currently trading at 10.8/8.2x FY19/20E EVE (adjusted for the Udaipur asset) which is at a 25-30% discount to peers. We expect this discount to narrow going forward on improvement in profitability. We value the company at 10x one-year forward EVE on account of cost saving measures in the Eastern market. Capacity utilisation of sub-70% gives the company significant headroom for growth. Additionally, management indicated expansion potential of 6MTPA across its existing plants. We arrive at a target price of INR 510/share (Mar'19) for JKL and maintain our BUY rating on the stock.

Recommendation and Price Target	
Current Reco.	BUY
Previous Reco.	BUY
Current Price Target (12M)	510
Upside/(Downside)	16.0%
Previous Price Target	520
Change	-1.9%

Key Data – JKLC IN	
Current Market Price	INR440
Market cap (bn)	INR51.7/US$0.8
Free Float	55%
Shares in issue (mn)	117.7
Diluted share (mn)	117.7
3-mon avg daily val (mn)	INR62.0/US$1.0
52-week range	537/375
Sensex/Nifty	33,627/10,332
INR/US$	65.0

Price Performance			
%	1M	6M	12M
Absolute	3.1	11.4	-3.0
Relative*	2.2	5.3	-13.7

* To the BSE Sensex

Financial Summary					(INR mn)
Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Sales	26,154	29,064	35,812	39,372	43,441
Sales Growth (%)	13.7	11.1	23.2	9.9	10.3
EBITDA	2,720	3,654	4,577	5,445	6,755
EBITDA Margin (%)	10.4	12.6	12.8	13.8	15.6
Adjusted Net Profit	42	820	1,071	1,873	3,099
Diluted EPS (INR)	0.4	7.0	9.1	15.9	26.3
Diluted EPS Growth (%)	-97.4	1,866.5	30.6	74.9	65.4
ROIC (%)	-0.4	7.8	8.3	11.2	15.8
ROE (%)	0.3	6.1	7.5	12.2	18.0
P/E (x)	1,241.6	63.1	48.3	27.6	16.7
P/B (x)	4.0	3.7	3.5	3.2	2.8
EV/EBITDA (x)	26.1	20.1	15.7	12.6	9.7
Dividend Yield (%)	0.5	0.1	0.4	0.7	1.2

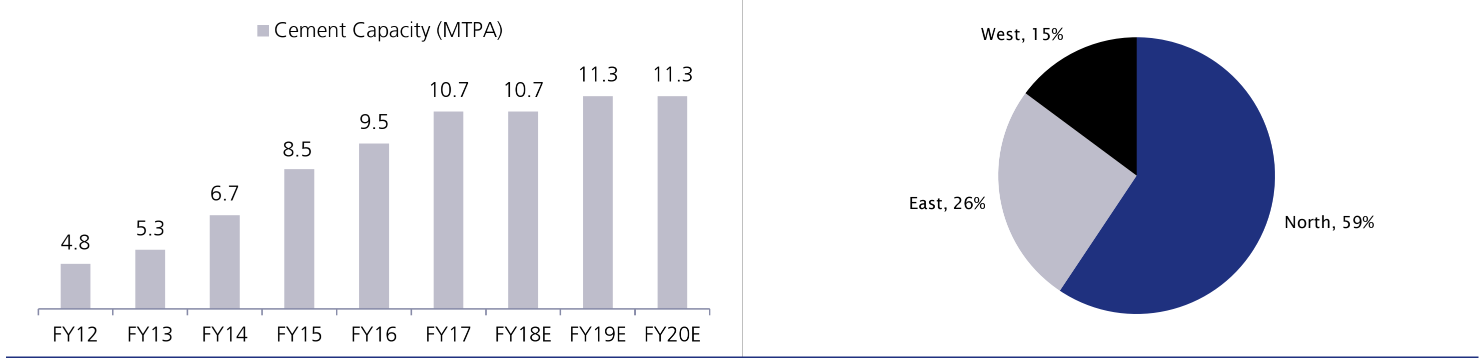
Source: Company data, JM Financial. Note: Valuations as of 06/Apr/2018

Expansion potential

- JK Lakshmi (JKL) has a total capacity of 10.7MTPA, of which 2.7MTPA is in the East and 8.2MTPA is in the North. The company also has a subsidiary named Udaipur Cement Works Ltd, which has capacity of 1.6MTPA in Udaipur. JKL is in the process of setting up a 0.6MTPA of greenfield grinding unit in Cuttack, Odisha.
- The company has brownfield expansion potential at all of its plants
  - 4MTPA in the North (2MTPA in Sirohi, 2MTPA in Udaipur)
  - 2MTPA in the East

Exhibit 1. JKL - Capacity growth trends and geographical split

Cement capacity doubled over FY13-17 | North a major market/Recent foray in east



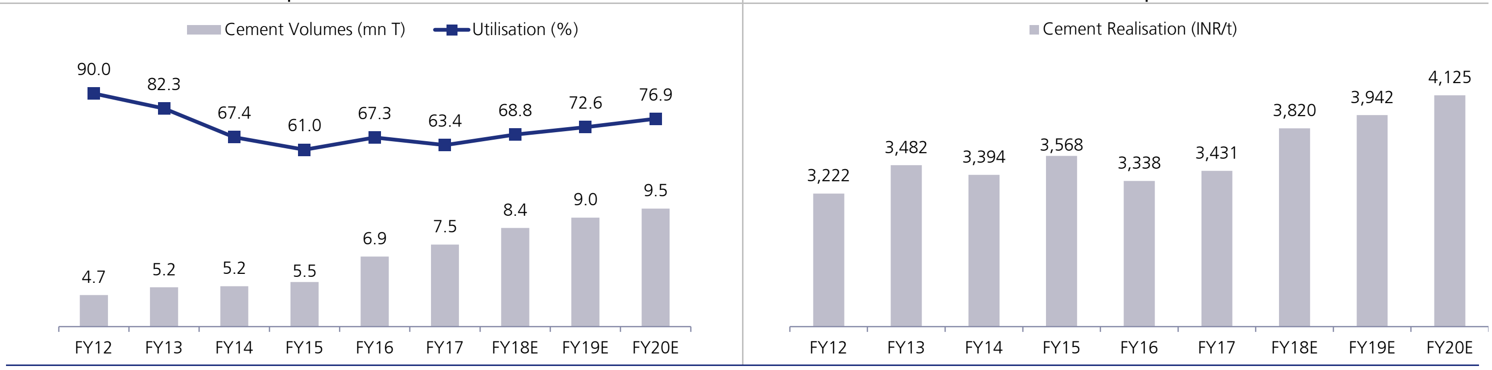
Source: Company, JM Financial

Operating parameters

- **Volume realisation trends –** We expect cement volumes to grow 8% and 5% over FY19 and FY20 and the company's utilisation levels to improve from 63% in FY17 to 77% in FY20E. Its realisations have thus far been stressed on account of the cap in cement prices in the state of Chhattisgarh. We expect realisations to improve on the back of the price cap dilution in Chhattisgarh.

Exhibit 2. JKLC – Volume/realisation trends

Volumes to post a 8% CAGR over FY17-20E | Realisation improvement

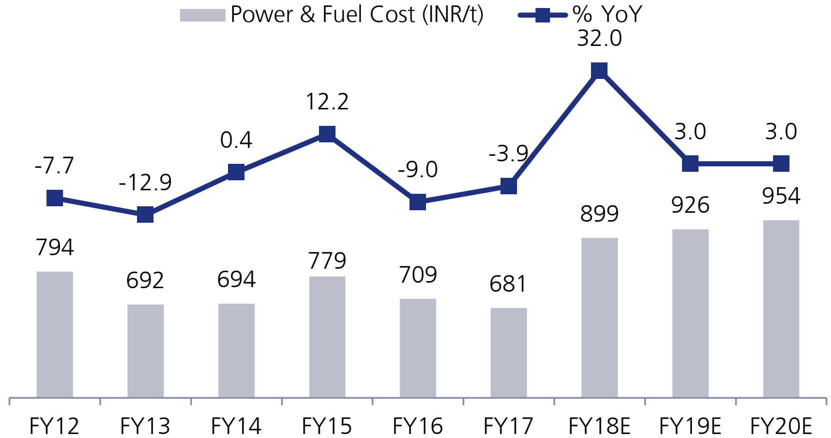


Source: Company, JM Financial

Cost trends

- **Power & fuel costs –** JKL's power and fuel costs have increased primarily owing to escalating petcoke/coal prices. Additionally, the ban on petcoke use in Rajasthan impacted costs in FY18. **Going forward, we expect the company to benefit on account of**
  - Commissioning of WHR in the East (INR 80/t benefit)
  - Commissioning of CPP in the East (INR 100/t benefit)

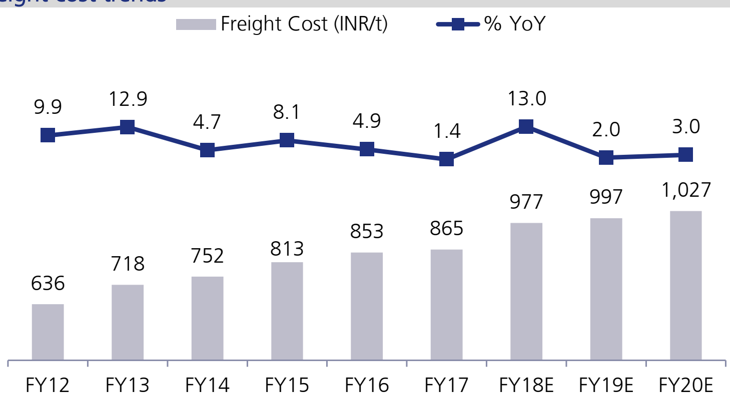
Exhibit 3. Power & Fuel cost trends



Source: Company, JM Financial

- **Freight Costs** – JKL's freight costs have been inching upwards primarily on escalating diesel prices. The busy season surcharge levy by railways has also impacted freight costs.

Exhibit 4. Freight cost trends



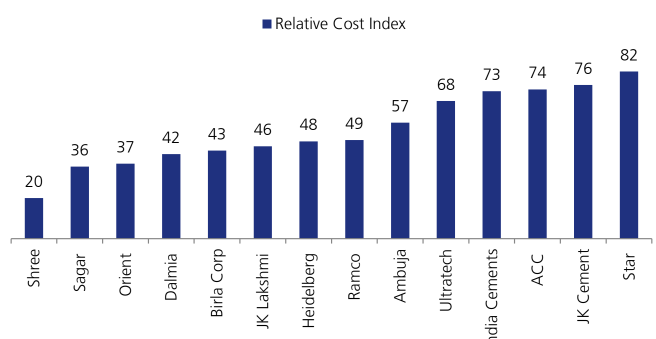
Source: Company, JM Financial

- **Focus on cost efficiency:** JKL's cost efficiency parameters are comparable with the best in the industry. Consistent improvement in energy efficiency has led to one of the lowest energy consumption parameters for production. Additionally, the company's overheads structure is one of leanest in the sector. It has commissioned 7.5MW of WHR and is in the process of commissioning 20MW of captive power through a plant at its facility in the East (25% of the total capacity). Management expects savings of INR 180-200/t from these projects, translating into an impact of INR 50-60/t on standalone EBITDA/t.

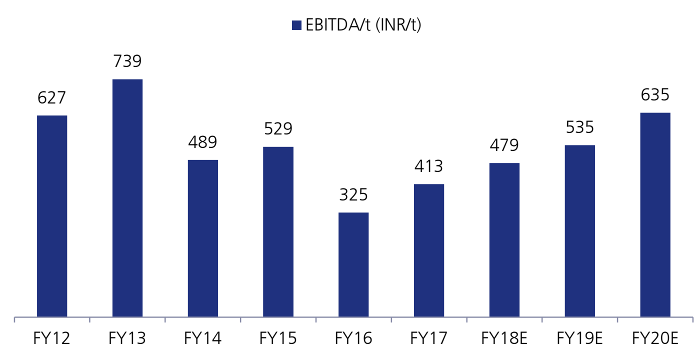
  EBITDA/t – We factor in EBITDA/t improvement over FY18-20E accounting for the improvement after WHR and CPP commissioning.

Exhibit 5. JKLC – Focus on cost efficiency to help improve EBITDA/t

One of the most cost efficient players in the industry



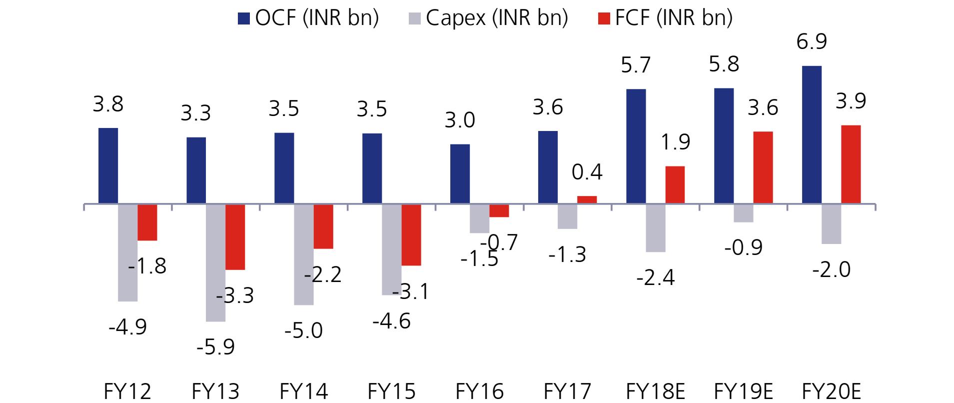
EBITDA/t to improve on improving efficiency



Source: Company, JM Financial

- **Cash flow trends –** No major capex in the next two years should help JKL generate significant free cash flow (INR 7.5bn over FY19-20E). Capacity ramp-up and improved profitability should help it improve the operating cash flow.

Exhibit 6. Cash flow trends

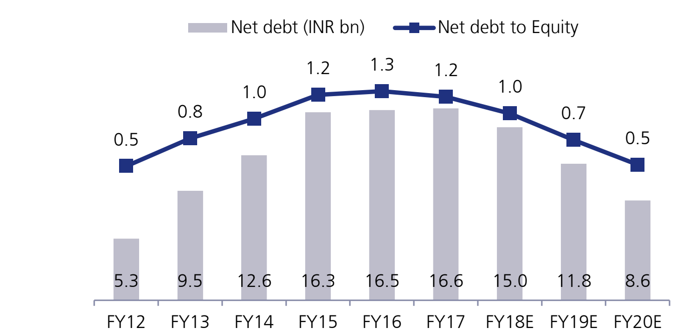


Source: Company, JM Financial

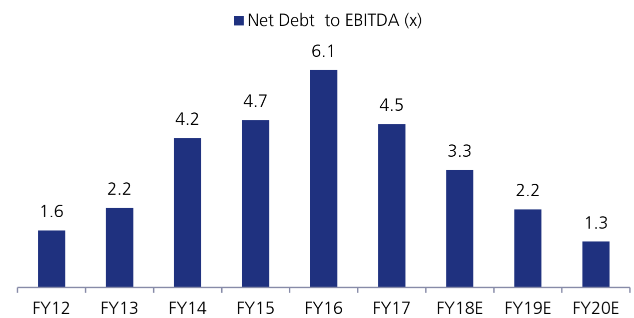
- **Debt trends –** We expect JKL's net debt to decline over FY19-20E on significant free cash flow generation of INR 7.5bn.

Exhibit 7. JKLC – Net debt to decline on incremental cash flows with no major capex going forward

Net debt to decline on significant free cash flow generation



Net debt/EBITDA to improve on declining net debt



Source: Company, JM Financial

Valuation

- JKL has historically traded at a 20-30% discount to its large-cap peers. We value the company at 10x one-year forward EVE as we factor in a similar valuation discount continuing. Capacity utilisation of sub-70% gives the company headroom for growth. Additionally, management indicated expansion potential of 6MTPA across its existing plants. We arrive at a target price of INR 510/share (Mar'19) for JMK and maintain our BUY rating on the stock.

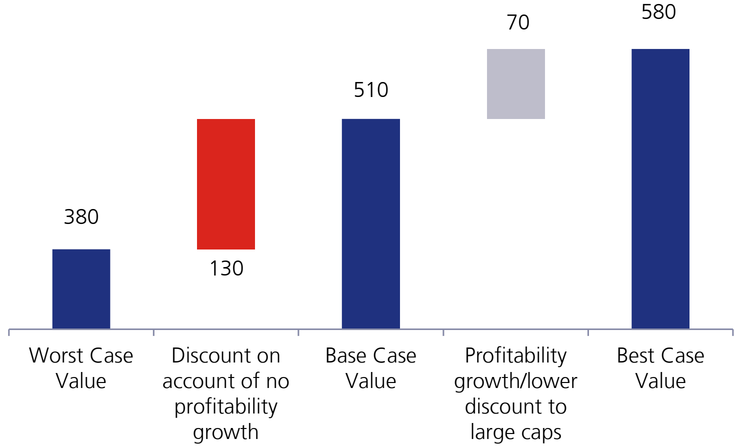
Exhibit 8. JKL trading at a discount/premium vs. large-cap peers

Source: Company, JM Financial, Bloomberg

Scenario analysis:

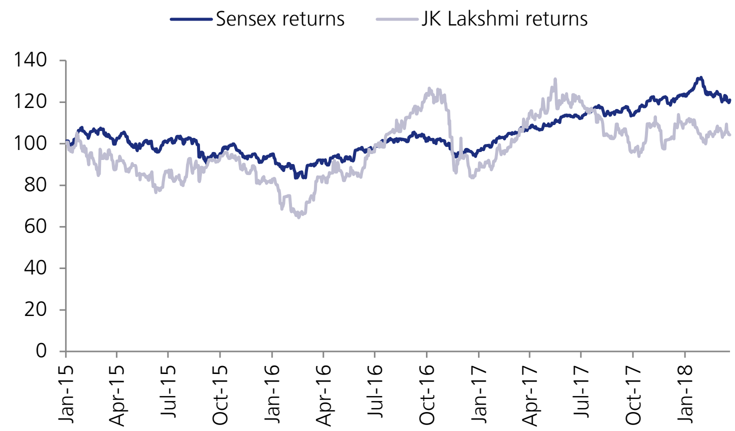
- For the worst case, we factor in a zero profitability growth scenario, while for the best case, we assume the stock valuation at a lower discount as against the base case.

Exhibit 9. Scenarios Analysis



Source: JM Financial

Exhibit 10. Relative returns



	Sensex	JK Lakshmi
1 yr return	13%	-7%
3 yr return	18%	10%
5 yr return	77%	321%

Source: JM Financial, Bloomberg

- Key Risks: **(i)** Cement prices have been capped in the state of Chhattisgarh and JKL's Eastern operations are concentrated there; any delay in the resolution of the price cap would adversely impact its profitability. **(ii)** Any action against cement pricing could have a material impact on profitability. **(iii)** CCI has been keeping a close watch on the cement industry and any adverse action against companies would be sentimentally negative. **(iv)** New players entering the market (Vicat/Cemex) could impact utilisations. **(v)** A further increase in raw material costs would also impact profitability.

Financial Tables (Standalone)

Income Statement (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Sales	26,154	29,064	35,812	39,372	43,441
Sales Growth	13.7%	11.1%	23.2%	9.9%	10.3%
Other Operating Income	45	40	0	0	0
Total Revenue	**26,199**	**29,104**	**35,812**	**39,372**	**43,441**
Cost of Goods Sold/Op. Exp	3,838	4,357	4,827	5,248	5,702
Personnel Cost	1,944	2,084	2,320	2,521	2,712
Other Expenses	17,697	19,009	24,088	26,157	28,271
EBITDA	**2,720**	**3,654**	**4,577**	**5,445**	**6,755**
EBITDA Margin	10.4%	12.6%	12.8%	13.8%	15.6%
EBITDA Growth	-22.2%	34.3%	25.3%	19.0%	24.1%
Depn. & Amort.	1,629	1,724	1,789	1,861	1,930
EBIT	1,091	1,930	2,788	3,585	4,825
Other Income	486	698	583	644	684
Finance Cost	1,967	1,887	2,033	1,887	1,637
PBT before Excep. & Forex	-389	742	1,339	2,342	3,873
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	-389	742	1,339	2,342	3,873
Taxes	-431	-78	268	468	775
Extraordinary Inc./Loss(-)	-107	0	0	0	0
Assoc. Profit/Min. Int.(-)	0	0	0	0	0
Reported Net Profit	-66	820	1,071	1,873	3,099
Adjusted Net Profit	**42**	**820**	**1,071**	**1,873**	**3,099**
Net Margin	0.2%	2.8%	3.0%	4.8%	7.1%
Diluted Share Cap. (mn)	117.7	117.7	117.7	117.7	117.7
Diluted EPS (INR)	**0.4**	**7.0**	**9.1**	**15.9**	**26.3**
Diluted EPS Growth	-97.4%	1,866.5%	30.6%	74.9%	65.4%
Total Dividend + Tax	283	35	251	438	725
Dividend Per Share (INR)	2.0	0.2	1.8	3.2	5.3

Source: Company, JM Financial

Balance Sheet (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Shareholders' Fund	13,041	13,817	14,637	16,072	18,446
Share Capital	589	589	589	589	589
Reserves & Surplus	12,452	13,228	14,049	15,484	17,857
Preference Share Capital	0	0	0	0	0
Minority Interest	0	0	0	0	0
Total Loans	19,147	21,706	21,556	19,056	16,556
Def. Tax Liab. / Assets (-)	163	0	0	0	0
Total - Equity & Liab.	**32,350**	**35,523**	**36,193**	**35,128**	**35,001**
Net Fixed Assets	30,126	30,314	30,925	29,979	30,050
Gross Fixed Assets	28,922	31,607	34,107	36,107	38,107
Intangible Assets	0	0	0	0	0
Less: Depn. & Amort.	1,627	3,343	5,133	6,993	8,923
Capital WIP	2,831	2,051	1,951	866	866
Investments	4,369	8,092	8,092	8,092	8,092
Current Assets	6,589	7,428	9,839	10,960	12,182
Inventories	2,406	2,776	3,434	3,775	4,166
Sundry Debtors	965	895	1,177	1,294	1,428
Cash & Bank Balances	118	90	1,561	2,224	2,921
Loans & Advances	394	543	543	543	543
Other Current Assets	2,707	3,124	3,124	3,124	3,124
Current Liab. & Prov.	8,734	10,312	12,663	13,904	15,322
Current Liabilities	1,987	2,648	4,999	6,240	7,658
Provisions & Others	6,747	7,664	7,664	7,664	7,664
Net Current Assets	-2,145	-2,884	-2,824	-2,943	-3,140
Total – Assets	**32,350**	**35,523**	**36,193**	**35,128**	**35,001**

Source: Company, JM Financial

Cash Flow Statement (INR mn)

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Profit before Tax	-389	742	1,339	2,342	3,873
Depn. & Amort.	1,629	1,724	1,789	1,861	1,930
Net Interest Exp. / Inc. (-)	1,932	1,865	2,033	1,887	1,637
Inc (-) / Dec in WCap.	270	-127	1,412	782	894
Others	-419	-548	-583	-644	-684
Taxes Paid	-47	-26	-268	-468	-775
Operating Cash Flow	**2,976**	**3,629**	**5,721**	**5,759**	**6,875**
Capex	-1,458	-1,251	-2,400	-915	-2,000
Free Cash Flow	1,518	2,379	3,321	4,844	4,875
Inc (-) / Dec in Investments	725	-2,929	0	0	0
Others	33	23	583	644	684
Investing Cash Flow	**-700**	**-4,156**	**-1,817**	**-271**	**-1,316**
Inc / Dec (-) in Capital	0	0	0	0	0
Dividend + Tax thereon	-281	-44	-251	-438	-725
Inc / Dec (-) in Loans	189	2,558	-150	-2,500	-2,500
Others	-2,218	-2,016	-2,033	-1,887	-1,637
Financing Cash Flow	**-2,311**	**499**	**-2,433**	**-4,825**	**-4,862**
Inc / Dec (-) in Cash	**-35**	**-28**	**1,471**	**663**	**697**
Opening Cash Balance	153	118	90	1,561	2,224
Closing Cash Balance	118	90	1,561	2,224	2,921

Source: Company, JM Financial

Dupont Analysis

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
Net Margin	0.2%	2.8%	3.0%	4.8%	7.1%
Asset Turnover (x)	0.8	0.9	1.0	1.1	1.2
Leverage Factor (x)	2.5	2.5	2.5	2.3	2.0
RoE	0.3%	6.1%	7.5%	12.2%	18.0%

Key Ratios

Y/E March	FY16A	FY17A	FY18E	FY19E	FY20E
BV/Share (INR)	110.8	117.4	124.4	136.6	156.8
ROIC	-0.4%	7.8%	8.3%	11.2%	15.8%
ROE	0.3%	6.1%	7.5%	12.2%	18.0%
Net Debt/Equity (x)	1.5	1.6	1.4	1.0	0.7
P/E (x)	1,241.6	63.1	48.3	27.6	16.7
P/B (x)	4.0	3.7	3.5	3.2	2.8
EV/EBITDA (x)	26.1	20.1	15.7	12.6	9.7
EV/Sales (x)	2.7	2.5	2.0	1.7	1.5
Debtor days	13	11	12	12	12
Inventory days	34	35	35	35	35
Creditor days	31	38	58	67	76

Source: Company, JM Financial

Annexures

Annexure 1

Scenario Analysis

Case 1 - 8% volume growth

Exhibit 1. Region wise industry utilisation levels at a 8% CAGR volume growth

Industry capacity utilisation assuming 80% incremental capacity share to be captured by top five players

	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
North	61	66	72	77	84	90	97	105	114
South	52	56	60	65	70	76	82	89	96
East	50	54	58	63	68	73	79	85	92
West	64	69	75	81	87	94	102	110	119
Central	74	79	86	93	100	108	117	126	136

Industry capacity utilisation assuming 60% incremental capacity share to be captured by top five players

	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
North	57	61	66	71	77	83	90	97	105
South	48	52	56	60	65	70	76	82	89
East	45	49	53	57	62	67	72	78	84
West	61	66	71	77	83	90	97	105	113
Central	73	79	85	92	99	107	116	125	135

Industry capacity utilisation assuming 40% incremental capacity share to be captured by top five players

	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
North	49	53	57	62	67	72	78	84	91
South	42	45	49	52	57	61	66	71	77
East	39	42	45	49	53	57	61	66	71
West	56	60	65	70	76	82	88	95	103
Central	71	77	83	90	97	105	113	122	132

Source: JM Financial, Industry

Case 2 – 10% volume growth

Exhibit 2. Region wise industry utilisation levels at a 10% CAGR volume growth

Industry capacity utilisation assuming 80% incremental capacity share to be captured by top five players

	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
North	63	69	76	83	92	101	111	122	134
South	53	58	64	70	77	85	93	103	113
East	51	56	61	67	74	82	90	99	109
West	65	72	79	87	96	105	116	128	140
Central	75	82	91	100	110	121	133	146	161

Industry capacity utilisation assuming 60% incremental capacity share to be captured by top five players

	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
North	58	63	70	77	84	93	102	112	124
South	49	54	59	65	71	79	86	95	105
East	46	51	56	62	68	74	82	90	99
West	62	69	75	83	91	100	110	121	133
Central	74	82	90	99	109	119	131	145	159

Industry capacity utilisation assuming 40% incremental capacity share to be captured by top five players

	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
North	50	55	60	66	73	80	88	97	107
South	42	47	51	56	62	68	75	83	91
East	39	43	48	52	58	63	70	77	84
West	57	62	69	76	83	91	101	111	122
Central	73	80	88	97	106	117	129	142	156

Source: JM Financial, Industry

Case 3 – 12% volume growth

Exhibit 3. Region wise industry utilisation levels at a 12% CAGR volume growth

Industry capacity utilisation assuming 80% incremental capacity share to be captured by top five players

	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
North	64	71	80	89	100	112	126	141	158
South	54	60	67	75	85	95	106	119	133
East	52	58	65	73	81	91	102	114	128
West	67	75	84	94	105	117	132	147	165
Central	76	85	96	107	120	134	151	169	189

Industry capacity utilisation assuming 60% incremental capacity share to be captured by top five players

	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
North	59	66	74	83	92	104	116	130	145
South	50	56	62	70	78	88	98	110	123
East	47	53	59	66	74	83	93	104	117
West	63	71	80	89	100	112	125	140	157
Central	76	85	95	106	119	133	149	167	187

Industry capacity utilisation assuming 40% incremental capacity share to be captured by top five players

	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
North	51	57	64	71	80	90	100	112	126
South	43	48	54	61	68	76	85	95	107
East	40	45	50	56	63	71	79	88	99
West	58	65	72	81	91	102	114	128	143
Central	74	83	93	104	116	130	146	164	183

Source: JM Financial, Industry

Annexure 2- Cost of manufacturing cement by type

- Clinker is an intermediate material required when manufacturing cement. It is obtained by burning limestone at a high temperature in the kiln. The clinker is then ground in the grinding unit, along with other additives, to create cement.
- Cement companies in India mainly use either petcoke or coal to burn limestone in the kiln.

Exhibit 4. 1 tonne of clinker requires

Limestone (tonnes)	1.50
Energy (Kcal)	7,00,000
Coal - 6000 Kcal/kg (tonnes)	0.12
Pet-coke - 8000 Kcal/kg (tonnes)	0.09

Source: JM Financial, Industry

- OPC has the highest manufacturing cost vs. PPC and PSC types of cement.
- Other common costs are freight, packaging and other overheads.

Exhibit 5. Cement costs per tonne

	OPC	PPC	PSC
Clinker requirement/t of cement (tonnes)	0.90	0.67	0.41
Limestone* (INR/t)	687	511	313
Coal/Pet-coke** (INR/t)	683/599	508/446	311/273
Gypsum (INR/t)	200	100	120
Slag (INR/t)	0	0	557
Fly Ash (INR/t)	0	240	0
Power Requirement			
Clinker Production (KWH/t of cement)	50	38	23
Cement Production (KWH/t of cement)	28	30	42
Packing/Despatches (KWH/t of cement)	2	2	2
Other misc. requirements (KWH/t of cement)	2	2	2
Total Power Requirement (KWH/t of cement)	82	71	68
Total Power Costs (INR/t)	573	497	479
Total Manufacturing costs (INR/t of cement)	**2,059**	**1,794**	**1,742**

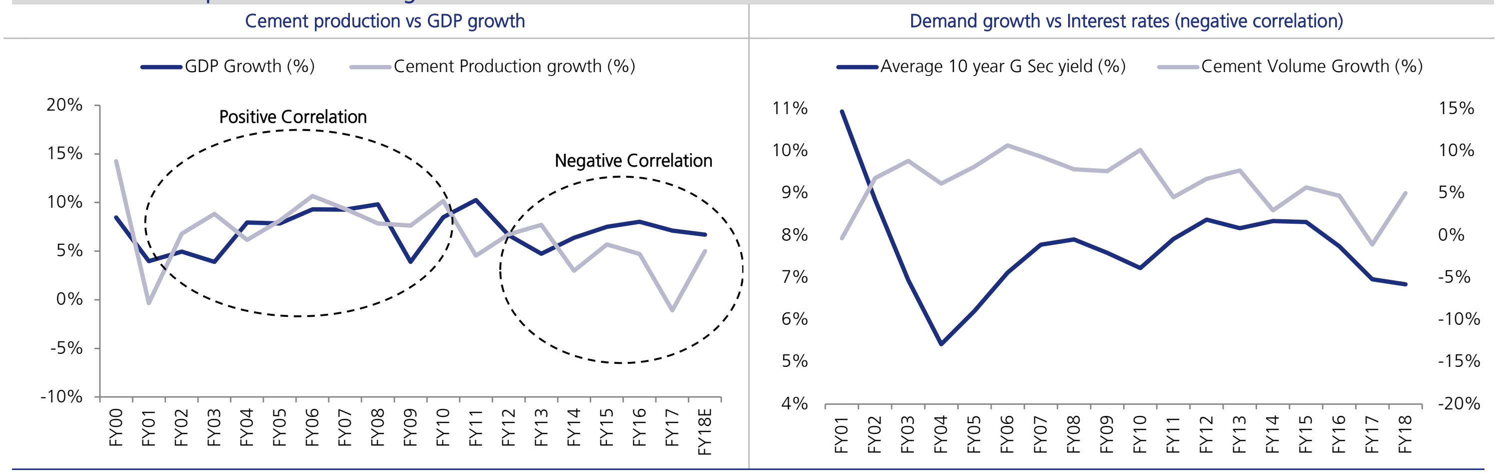
Source: JM Financial, Industry | * includes mining cost and royalty payment to the government, ** Coal costs is greater than coke and hence coke costs are used to calculate the per tonne cost of cement

Annexure 3

Cement demand growth – correlation with GDP/interest rates

- Historically, Cement production followed the GDP growth till FY10, however post FY10 there has been a negative correlation between GDP growth and Cement volumes.
- Cement demand is negatively correlated with the interest rates. Housing being a major demand driver for cement, lower interest rates will lead to higher number of houses being constructed. Hence, interest rates could be a better indicator of cement demand growth.

Exhibit 6. Cement production vs GDP growth/Interest rates



Source: Company, JM Financial, Industry

Annexure 4

Regionwise capacity, production and utilisation trends

Exhibit 7. Region wise capacity, production and utilisation

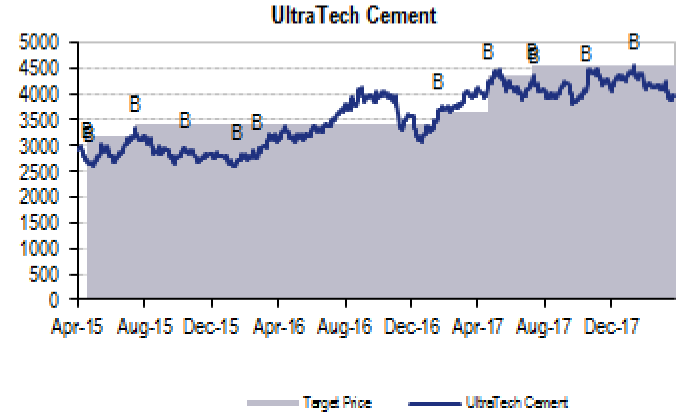
Regional	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E	FY20E
East														
Capacity (mn T)	27	30	33	40	43	48	49	56	63	66	78	86	93	96
Production (mn T)	24	25	26	29	32	34	36	40	43	46	47	50	55	60
Capacity utilisation (%)	91.6	87.3	81.8	79.2	77.0	73.7	73.8	75.7	72.6	71.8	64.7	60.7	61.2	63.9
West														
Capacity (mn T)	28	31	32	41	44	46	54	54	58	62	62	63	72	78
Production (mn T)	27	29	28	31	32	32	35	38	41	44	44	46	51	56
Capacity utilisation (%)	96.1	96.3	90.1	85.2	75.0	71.7	71.1	71.7	74.4	74.1	70.5	73.7	75.5	74.8
North														
Capacity (mn T)	37	51	53	66	71	72	77	83	91	96	102	106	109	111
Production (mn T)	32	36	41	46	50	51	54	59	63	66	67	69	74	79
Capacity utilisation (%)	89.0	83.2	79.3	78.0	74.0	71.9	72.4	74.0	71.9	70.9	67.4	66.5	68.7	71.5
South														
Capacity (mn T)	75	83	101	128	132	138	147	149	153	158	158	162	175	177
Production (mn T)	50	54	60	65	68	71	78	82	84	86	87	91	97	104
Capacity utilisation (%)	68.7	68.6	65.1	56.9	52.0	52.4	54.4	55.5	55.5	55.5	54.8	56.8	57.9	59.0
Central														
Capacity (mn T)	28	31	31	36	42	43	47	54	57	61	61	61	65	66
Production (mn T)	22	24	26	30	31	32	34	39	41	43	43	45	49	53
Capacity utilisation (%)	79.5	80.4	83.4	87.8	78.6	73.9	74.7	76.8	74.6	73.4	71.2	74.0	77.9	81.2

Source: JM Financial, Industry

History of Earnings Estimate and Target Price

Date	Recommendation	Target Price	% Chg.
23-Apr-15	Buy	3,400	
27-Apr-15	Buy	3,200	-5.9
21-Jul-15	Buy	3,400	6.3
20-Oct-15	Buy	3,400	0.0
21-Jan-16	Buy	3,400	0.0
1-Mar-16	Buy	3,400	0.0
24-Jan-17	Buy	3,670	7.9
26-Apr-17	Buy	4,350	18.5
14-Jul-17	Buy	4,550	4.6
20-Jul-17	Buy	4,550	0.0
23-Oct-17	Buy	4,550	0.0
18-Jan-18	Buy	4,550	0.0

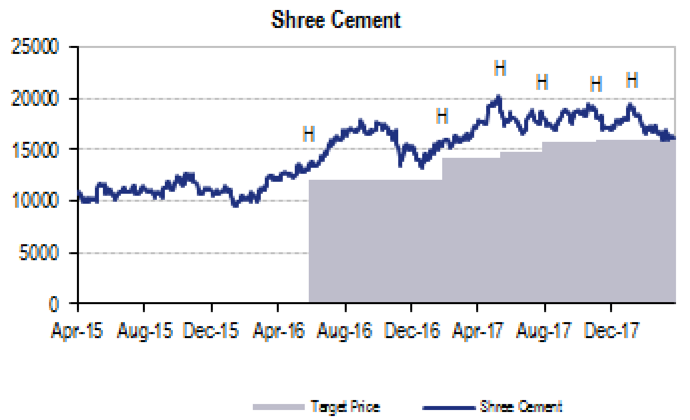
Recommendation History



History of Earnings Estimate and Target Price

Date	Recommendation	Target Price	% Chg.
2-Jun-16	Hold	12,000	
31-Jan-17	Hold	14,150	17.9
16-May-17	Hold	14,700	3.9
1-Aug-17	Hold	15,800	7.5
8-Nov-17	Hold	16,000	1.3
12-Jan-18	Hold	16,000	0.0

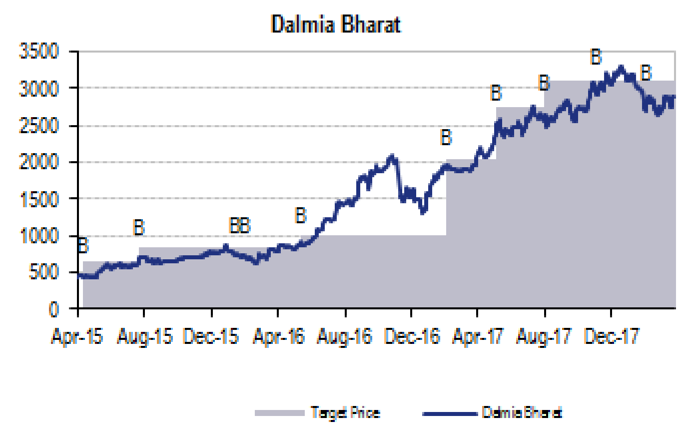
Recommendation History



History of Earnings Estimate and Target Price

Date	Recommendation	Target Price	% Chg.
17-Apr-15	Buy	650	
30-Jul-15	Buy	850	30.8
18-Jan-16	Buy	850	0.0
7-Feb-16	Buy	850	0.0
19-May-16	Buy	1,000	17.6
7-Feb-17	Buy	2,050	105.0
11-May-17	Buy	2,750	34.1
7-Aug-17	Buy	3,100	12.7
7-Nov-17	Buy	3,100	0.0
9-Feb-18	Buy	3,100	0.0

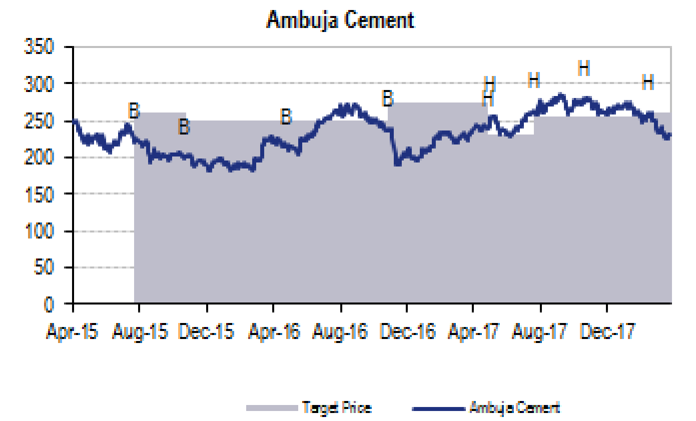
Recommendation History



History of Earnings Estimate and Target Price

Date	Recommendation	Target Price	% Chg.
28-Jul-15	Buy	260	
29-Oct-15	Buy	250	-3.8
29-Apr-16	Buy	250	0.0
3-Nov-16	Buy	275	10.0
2-May-17	Hold	230	-16.4
8-May-17	Hold	230	0.0
25-Jul-17	Hold	255	10.9
25-Oct-17	Hold	255	0.0
20-Feb-18	Hold	260	2.0

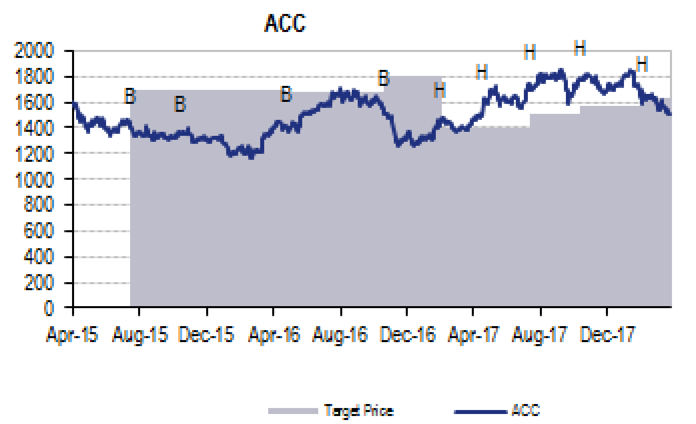
Recommendation History



History of Earnings Estimate and Target Price

Date	Recommendation	Target Price	% Chg.
20-Jul-15	Buy	1,700	
21-Oct-15	Buy	1,700	0.0
29-Apr-16	Buy	1,675	-1.5
24-Oct-16	Buy	1,800	7.5
6-Feb-17	Hold	1,400	-22.2
24-Apr-17	Hold	1,400	0.0
18-Jul-17	Hold	1,500	7.1
18-Oct-17	Hold	1,570	4.7
9-Feb-18	Hold	1,630	3.8

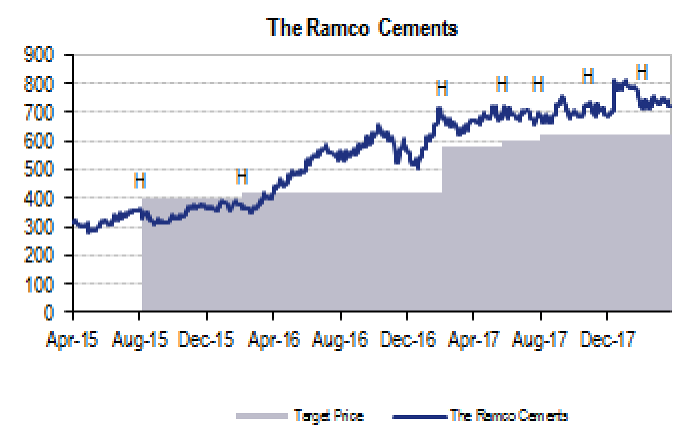
Recommendation History



History of Earnings Estimate and Target Price

Date	Recommendation	Target Price	% Chg.
10-Aug-15	Hold	400	
10-Feb-16	Hold	420	5.0
8-Feb-17	Hold	580	38.1
30-May-17	Hold	600	3.4
4-Aug-17	Hold	625	4.2
3-Nov-17	Hold	625	0.0
6-Feb-18	Hold	625	0.0

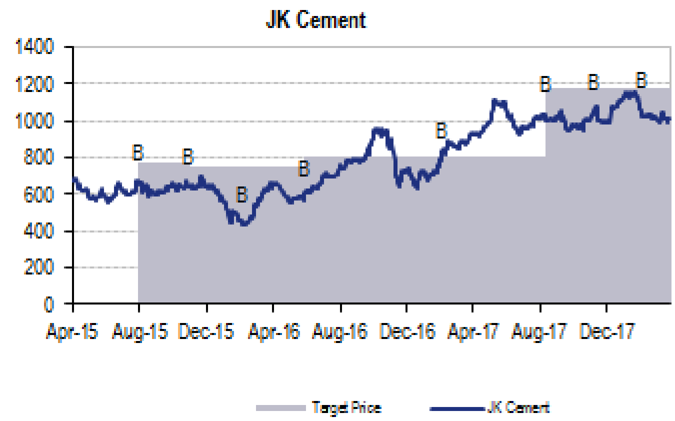
Recommendation History



History of Earnings Estimate and Target Price

Date	Recommendation	Target Price	% Chg.
4-Aug-15	Buy	770	
4-Nov-15	Buy	750	-2.6
11-Feb-16	Buy	750	0.0
2-Jun-16	Buy	800	6.7
7-Feb-17	Buy	810	1.3
17-Aug-17	Buy	1,170	44.4
12-Nov-17	Buy	1,170	0.0
6-Feb-18	Buy	1,170	0.0

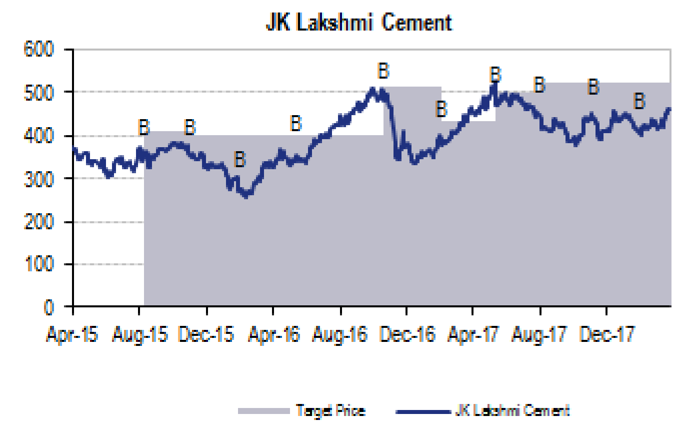
Recommendation History



History of Earnings Estimate and Target Price

Date	Recommendation	Target Price	% Chg.
14-Aug-15	Buy	410	
9-Nov-15	Buy	400	-2.4
7-Feb-16	Buy	400	0.0
19-May-16	Buy	400	0.0
27-Oct-16	Buy	515	28.8
7-Feb-17	Buy	435	-15.5
19-May-17	Buy	500	14.9
7-Aug-17	Buy	520	4.0
13-Nov-17	Buy	520	0.0
5-Feb-18	Buy	520	0.0

Recommendation History



Notes

APPENDIX I

JM Financial Institutional Securities Limited

(formerly known as JM Financial Securities Limited)

Corporate Identity Number: U67100MH2017PLC296081
Member of BSE Ltd., National Stock Exchange of India Ltd. and Metropolitan Stock Exchange of India Ltd.
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Compliance Officer: Mr. Sunny Shah | Tel: +91 22 6630 3383 | Email: sunny.shah@jmfl.com

Definition of ratings	
Rating	Meaning
Buy	Total expected returns of more than 15%. Total expected return includes dividend yields.
Hold	Price expected to move in the range of 10% downside to 15% upside from the current market price.
Sell	Price expected to move downwards by more than 10%

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