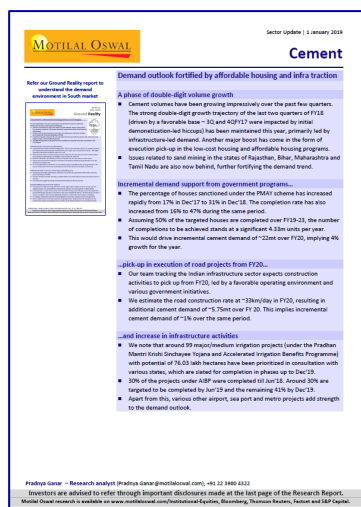


Please refer to our report



Constant capacity addition to keep cement utilization under check

...however, clinker utilization to improve substantially

Cement utilization to reach 70%, while clinker utilization to improve to 80% by FY21

- The Indian cement industry should witness a capacity addition of ~77mt over FY19-21E— translating to a capacity addition of ~26mt each year and registering a 6% CAGR over FY19-21E. But, total clinker addition during the same period is pegged at just 34mt. As a result, cement utilization is expected to increase 5.5pp to 70%, while clinker utilization should increase 9.4pp to 80% over FY18-21E.
- In the recent limestone bids, ~2,330mt of limestone reserves were auctioned since 2016; of this, 34% reserves are in the western region. The northern and the eastern regions each comprised 28-29% of the reserves auctioned.
- Apart from the 77mt of additional capacities, dormant plants like Kalyanpur and Murli should also come on stream over FY19-21. The recent ramp-up of Binani's assets and its brownfield capacity augmentation will also be a key monitorable.

Northern region to witness maximum utilization improvement

- The eastern region should witness maximum amount of capacity addition, to the extent of 26mt over FY18-21, followed by the southern region witnessing an addition of 20mt. The northern region seems to be better placed and should witness capacity addition of only 6mt over the period as a result of which cement utilization should improve 14pp to 84%.
- ~34mt of clinker capacity is expected to get added over FY19-21. The western region is expected to witness the least clinker addition, followed by the eastern region. Highest amount of clinker addition is expected in South India.

Increase in low cost brownfield expansion to lead to healthy return ratios

- The post-tax ROCE for the top-5 players has decreased from 10% in the 1990's to 7% currently as replacement costs increased from USD65/t to USD100/t.
- Our analysis suggests that ~66% of the capacity put up over FY15-18 was in the form of high-cost greenfield expansion (typically entails 45% higher capex and generates lower ROCE).
- We expect ~47% of the entire capacity addition over the next three years to be in brownfield (constitutes 34% of the capacity added over FY15-18). In order to achieve a post-tax ROCE of 12%, with replacement cost at INR7,800/t for greenfield and INR4,300 for brownfield, the required EBITDA/t should be ~INR2,159/t and INR1,187/t, respectively.

Garnering market share remains a priority

- The Holcim group — which had been a laggard in capacity addition, has now started focusing on growth, as is evident from its recent capacity expansion plan.

- India Cements and Sagar Cement's expansion plans to venture into Central India shows that players are diversifying their presence in other regions.
- Dalmia has continued its endeavor to become a pan-India player. After its failure to acquire the insolvent Binani Cement, Dalmia has secured mining rights near Chittorgarh; it is also contemplating building a 4mt plant there.

Balance sheet constraint for midcaps may result in slippages in capacity addition

- We analyzed the balance sheet strength of our coverage companies to understand their ability to incur large capex over the next 2-3 years.
- Net debt to EBITDA for mid cap cement companies is higher than 3.0x on FY19 financials. Thus, midcap cement companies might face limitations in committing capex due to cash flow constraints.
- We believe there will be slippages in the expansion plans of Orient Cement and India Cement.

Valuation and View

We prefer companies with higher exposure to the northern region, as the North is pegged to witness the maximum improvement in capacity utilization. Our top picks to play the North theme are SRCM and JKCE. We also like ACC, which is on a growth capex mode and should witness improvement in profitability.

Key beneficiaries:

ACC: The company is planning to add 6mt of capacity at a total capex of INR30b (~USD71/t), which will come on stream over the next three years. This will be funded by internal accruals and help the company to protect its market share in the central and eastern regions. ACC's profitability gap with peers has narrowed significantly over the last few quarters, led by higher proportion of (a) premium sales, and (b) sales from its new cost-efficient units of Jamul and Sindri. The company has also done well to manage costs, driven by higher proportion of linkage coal, lower lead distance and route optimization. Besides this, ACC is trying to rationalize fixed costs. The stock trades attractively at 6.1x FY21 EV/EBITDA. With growth concerns being addressed, the valuation discount of over 40% to large caps on EV/ton and EV/EBITDA should narrow substantially. We value ACC at 9x CY20E EV/EBITDA to arrive at a target price of INR1,838.

Shree Cement (SRCM): The company is increasing its domestic capacity by ~22% over FY18-21 at an estimated capital cost of USD25/t. SRCM's relatively low cost of production compared to peers has resulted in healthy margins and return ratios. As a result, it warrants premium valuations, in our view. We expect SRCM to deliver a better-than-industry performance due to (a) capacity ramp-up over FY19-21, and (b) a favorable market mix, with higher exposure to the northern markets (~70%), where prices are expected to be healthy. We value SRCM at 15x FY21 EV/EBITDA and arrive at a target price of INR20,221.

JK Cement: JKCE is strategically placed to benefit from the expected price improvement in the North due to limited supply addition. Incrementally, the grey cement division should see marked improvement in profitability due to higher

proportion of volumes from new efficient units. The white cement business has gained meaningful scale and deserves premium valuations, given raw material scarcity and JKCE's 40-45% share in the domestic white cement market. We value the white cement segment at an EV/EBITDA of 10x FY21E and the grey cement business at an EV/EBITDA of 8x (FY21E) to arrive at a target price of INR825.

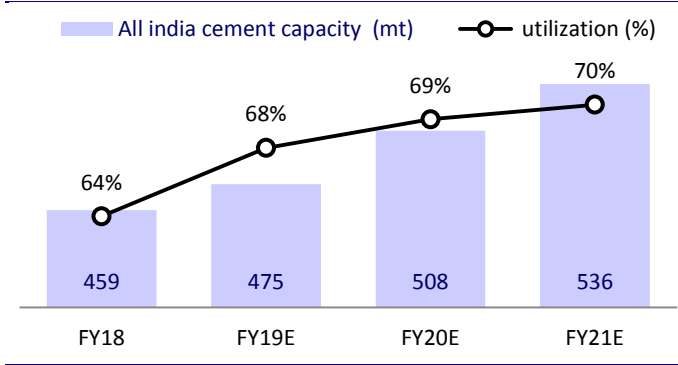
Exhibit 1: Cement: Valuation summary

	CMP	ROE (%)			PE (x)			EV/EBITDA (x)			EV/Ton (USD)		
		FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
ACC	1,376	10.8	13.3	14.4	24.0	17.6	14.4	10.5	7.8	6.1	93	84	76
ACEM	210	6.1	6.3	7.0	23.2	21.4	18.9	13.2	11.8	10.3	117	117	120
UTCEM	3,710	7.9	9.5	10.6	48.0	35.3	26.8	18.2	15.0	12.4	169	155	145
SRCM	16,546	14.3	15.6	17.1	43.4	35.5	28.0	18.7	14.5	11.6	192	164	149
BCORP	466	4.6	8.3	10.9	18.2	9.6	6.7	7.7	6.1	5.0	60	61	59
ICEM	71	1.1	2.8	4.1	44.7	17.9	12.0	9.2	7.5	6.7	51	50	50
JKCE	708	12.8	13.0	12.8	20.6	18.3	16.8	7.8	9.0	7.6	72	69	66
JKLC	314	4.9	8.4	12.6	50.7	27.9	16.9	11.3	8.7	6.6	54	51	46
MCEM	648	11.0	12.3	14.1	32.8	26.5	20.6	16.0	14.0	10.8	126	114	109
ORCMNT	71	-0.8	6.0	10.7	-179.9	23.7	12.3	11.6	8.5	6.0	46	41	31
PRISM	74	12.6	14.2	14.2	27.4	21.8	19.3	9.1	8.4	8.0	50	47	46
SNGI	54	2.5	3.3	3.3	32.3	24.1	23.5	13.7	13.3	8.2	46	45	45

Expect cement utilization to improve to 70% and clinker utilization to improve to 80% by FY21

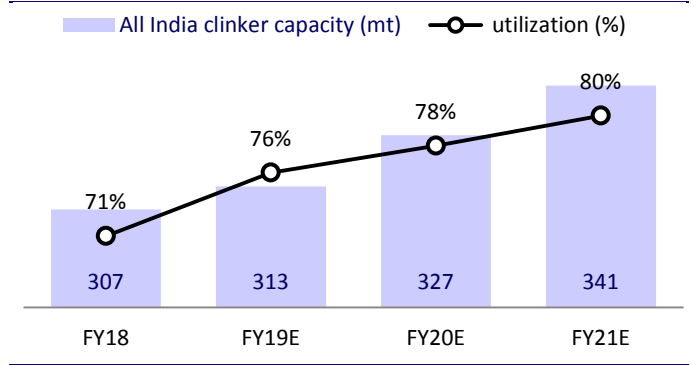
- The Indian cement industry should witness ~77mt of capacity addition over FY19-21E. This translates into ~26mt of capacity addition each year registering a 6% CAGR over FY19-21E. Total clinker addition over the next three years is pegged at only 34mt. As a result, while cement utilization is expected to increase by 5.5pp to 70%, clinker utilization is expected to increase 9.4pp to 80% over FY18-21E.

Exhibit 2: While cement utilization is expected to improve by 5.5pp over FY18-21E...



Source: MOSL, Company

Exhibit 3: ...clinker utilization is expected to improve by 9.4pp over FY18-21E...

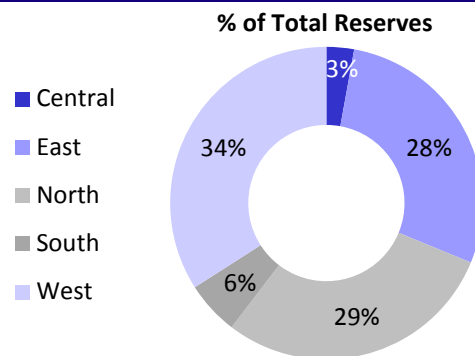


Source: MOSL, Company

Recent limestone bids hint towards maximum capacity addition in the West

- We analyzed the recent limestone bids since 2016. Reserves worth 2,330mt were auctioned, of which 34% are in the western region. ~28% of the reserves auctioned fell in the eastern and northern region.
- Assuming an average reserve life of 30 years, 2,330mt of reserves can result in 55mt of annual capacity.

Exhibit 4: Region-wise split of reserves auctioned



Source: MOSL, Company

- According to the MMDR, each and every mine granted by way of LOI (Letter of Intent)/mining lease shall come into production within 5/3 years. Thus, we expect mines allocated in 2016 to come up with capacities before FY21. Of these, Penna, Shree, DBEL have already announced expansion.

Exhibit 5: Capacities auctioned in 2016 should come on stream by 2021

States	Name of the block	Preferred Bidder	Area (Ha)	Reserves (mt)	E auction date
Andhra Pradesh	Gudipadu limestone block	Penna cements	41	27	08.06.16
Chattisgarh	Kesla, Raipur	Century cement	108	67	19.02.16
Chattisgarh	Karhi Chandi, Balodabazar- Bhatapara	Shree cement	242	155	18.02.16
Jharkhand	Harihaspura Block I, Ramgarh	Burnpur Cement	180	0.42	12.02.16
Jharkhand	Harihaspura Block II, Ramgarh	Burnpur Cement	379	0.67	12.02.16
Orissa	Kottameta , Malkangiri	Dalmia Bharat	801	99	27.12.16
Rajasthan	Limestone block- 3B1-(b) n/v Deh of tehsil JayalDistrict Nagaur	Emami cement	247	169	22.09.16

Source: MOSL, Company

- Apart from the 77mt of additional capacities, certain dormant capacities like Kalyanpur and Murli should also come on stream over FY19-21. The recent ramp-up of Binani's assets and its subsequent brownfield expansion will also be a key monitorable. Binani's assets operated at a utilization of 55% in 3QFY19. The ramp-up of the 6.25mt capacity from 55% to 75% would result in 1.25mt of additional capacity. Among other defunct capacities are CCI's assets worth 2.5mt, which can be sold to other private players.

Exhibit 6: Non-operational capacities

Region	Plant	IU/GU	Company	Capacity (mt)
East	Burnpur Cement, Jharkhand	IU	Burnpur Cement	0.5
North	CCI Delhi (G)	GU	CCI	0.5
North	CCI Bhatinda, (G), punjab	GU	CCI	0.5
Central	Neemuch, Madhya Pradesh	IU	CCI	0.4
South	Kurkunta, Karnataka	IU	CCI	0.2
East	Akaltara, Chattisgarh	IU	CCI	0.4
West	Mandhar, Maharashtra	IU	CCI	0.4
South	Kistna, Andhra Pradesh	IU	HMP Cmts. Ltd.	0.2
East	Kalyanpur Cement, Bihar	IU	Kalyanpur Cement	1.0
West	Murli Cement, Maharashtra	IU	Murli Cement	3.0
	Total			7.1

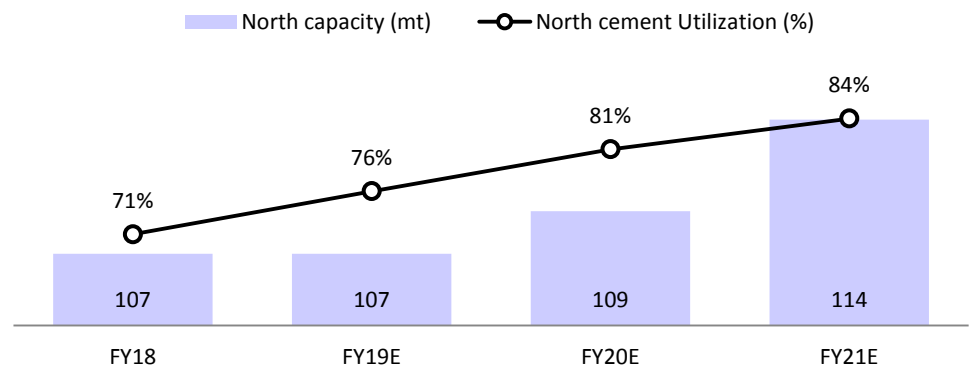
Source: MOSL, Company

North likely to witness least amount of capacity addition

- We expect the northern region to witness capacity addition of ~6.3mt over FY19-21E. Wonder Cement is expected to put up a capacity of 2.5mt in Nimbahera. Also, JKCE is putting an integrated unit of 1mt in Mangrol and another 1mt in Grinding capacity at Nimbahera. Ambuja Cement has also announced 1.8mt of cement capacity addition at Marwar Mundwa.
- The region should, however, witness supply shocks in the following form
 1. UTCEM's program of ramping up Binani's assets from 6.25mt to 10-11mt could result in additional capacity in the region. However, we believe this should happen only after FY21, as UTCEM would first try to increase the utilization and stabilize operations of its current assets.
 2. After its failure to acquire the insolvent Binani Cement, Dalmia Bharat might decide to put up a new unit in Rajasthan to enable its entry into the North Indian market. The company has, secured mining rights near Chittorgarh and is planning to build a 4mtpa plant, in two phases and should come on stream only after FY21.

- 3. Ambuja’s 3.1mt of clinker capacity can support a cement capacity of ~4.5mt. While only 1.8mt has been announced, we expect additional 2.5mt of capacity announcement in the northern or central region.
- Assuming demand in the Northern region grew at a CAGR of 8% over FY19-21E, the region should witness cement utilization improvement from 71% in FY18 to 84% in FY21.

Exhibit 7: North capacity utilization to reach ~84% by FY21

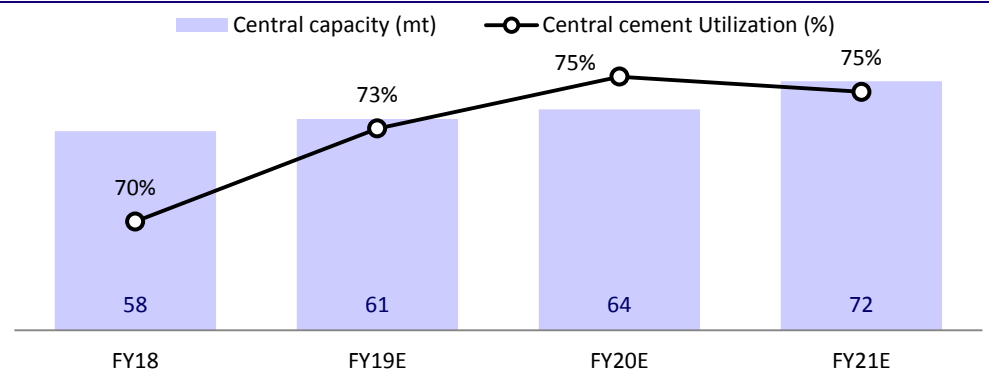


Source: Company, MOSL

Central region too likely to see healthy demand improvement

- The central region is likely to see capacity addition of 15mt over FY19-21E translating into a capacity CAGR of 9%.
- While UTCCEM has already commissioned its Dhar unit of 3.5mt in FY19, the Bara unit of 4mt is expected to come on stream by FY21. JKCE should commission its Aligarh unit by FY20-end. FY21 should witness capacity addition by Wonder and Sagar Cement. Birla Corp is also augmenting its capacity by 1.2mt in Kundanganj, Uttar Pradesh, which should come on stream by FY21.
- ACC’s recently announced capacity addition of ~4.8mt in the central region should come on stream by FY22.
- Assuming demand in the region grows at a CAGR of 8% over FY19-21E, utilization in the region is expected to increase from 70% in FY18 to 75% in FY21.

Exhibit 8: Central region should witness capacity utilization of ~75% in FY21

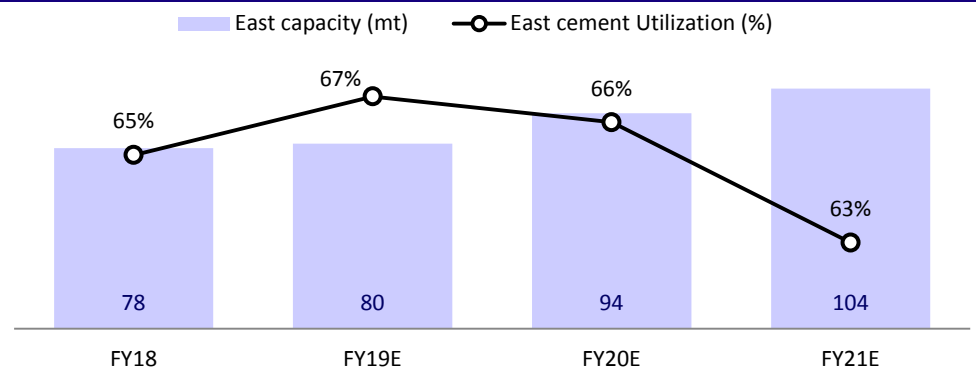


Source: Company, MOSL

East should see highest capacity addition

- The eastern region is likely to see capacity addition of 26mt translating into a CAGR of 14% over FY19-21E.
- Of the 26mt, 6mt by Dalmia to be added by FY21 (Part of the 8mt capex program announced by the company for the East).
- Shree's capacity of 5.5mt in Jharkhand and Orissa is expected to come on stream by FY20 along with Ramco's Kolaghat and Jajpur Units.
- Apart from this, the region should witness addition by other players like JKLC, Emami, Star, JSW, Orient and Sagar Cement.
- The region is also likely to see healthy demand growth (CAGR of 9%) over FY18-20 on account of low per capita consumption and the government's increased thrust on housing/road projects. But, utilizations are expected to remain under check due to increased capacity addition.
- Utilizations in the region should decline from 65% in FY18 to 63% in FY21.

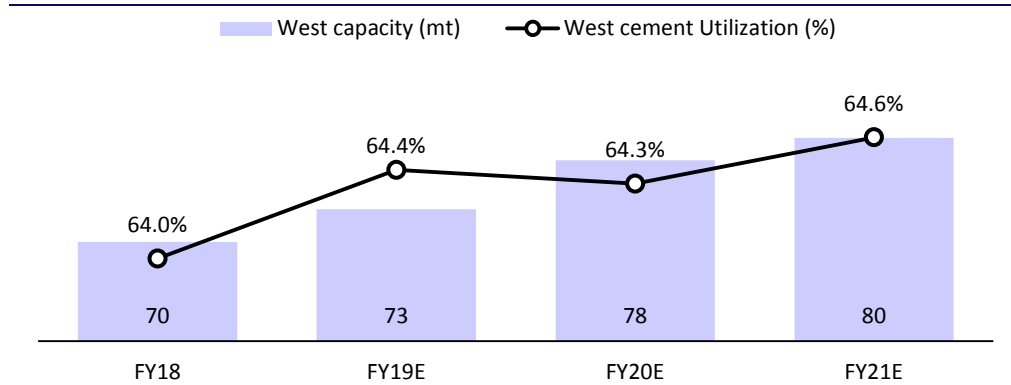
Exhibit 9: East region should witness capacity utilization of 63% in FY21



Source: Company, MOSL

West likely to see modest demand growth

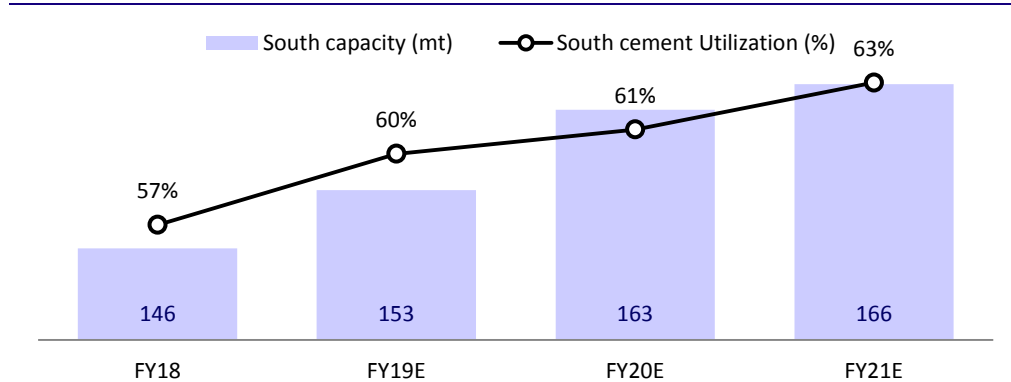
- The region should witness capacity addition by Sanghi of 4mt in the Kutch region and by JKCE of 0.7mt at Wanakbori, Gujarat. Moreover, Shree plans to start a grinding unit of 2.5mt in Pune by FY20-end. With JSW and Wonder Cement also planning to augment capacity in the West, the region should witness an overall capacity addition of 10mt over FY19-21.
- Demand in the region is expected to grow at 5% CAGR over FY19-21, as healthy demand from the infrastructure segment should be offset by weak demand from the urban housing segment.
- The utilization in the region is expected to increase from 64% in FY18 to 65% in FY21.

Exhibit 10: Utilization to increase to 65% by FY21 in the western region

Source: MOSL, Company

South likely to see healthy demand growth

- The region should witness supply from Ramco, JSW, Chettinad, Penna and Orient and should result in total capacity addition of ~20mt.
- Assuming the region to grow at a CAGR of 8% over FY19-21E, we expect utilization levels to increase from 57% in FY18 to 63% in FY21.

Exhibit 11: Utilization to increase to 64% by FY21 in southern region

Source: MOSL, Company

West likely to see least clinker addition, while south to see the highest

- We expect 34mt of clinker addition over FY19-21. The West should witness the least amount of clinker addition followed by the East. The additional clinker requirement for the western region will be met by Rajasthan, while for the eastern region, it will come from Satna cluster.
- The South should witness the highest amount of clinker addition — ~30% of the total clinker addition will be from southern region.

Exhibit 12: Region-wise clinker addition

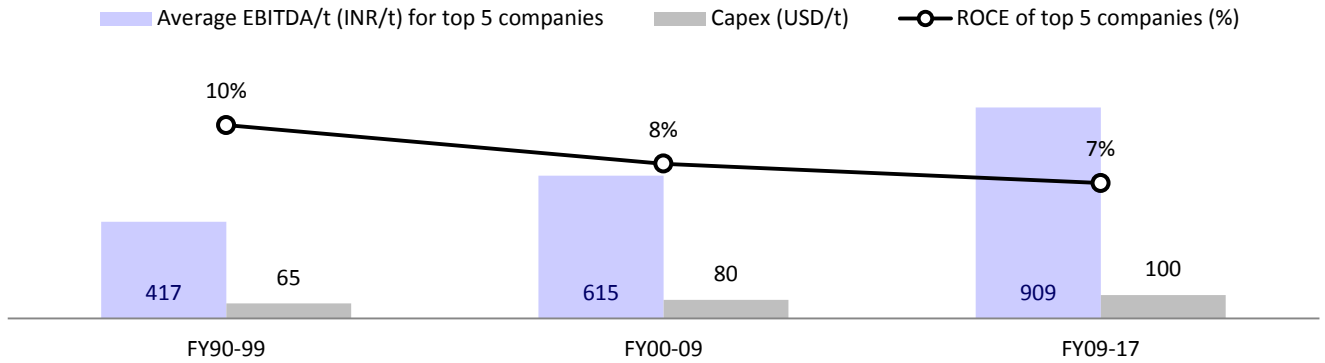
	Central	East	North	South	West
FY19	2.4			3.9	
FY20	0.7	1.8	2.7	6.5	2.3
FY21	3	3	5.6	2	
Total	6.1	4.8	8.3	12.4	2.3

Source: MOSL, Company

Proportion of low cost brownfield capacity expected to increase

- The pace of cement capacity addition in India was quite high over FY12-18. Also, at the time, greenfield capital cost was constantly increasing due to higher underlying prices of land (partially offset by lower equipment prices).
- The post-tax ROCE for the top-5 players decreased from 10% in the 1990's to 7% currently as replacement costs increased from USD65/t to USD100/t.

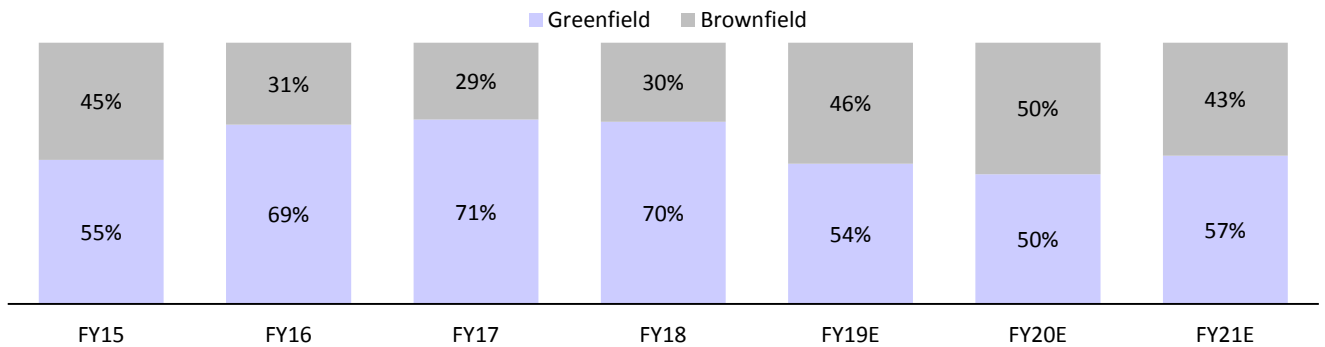
Exhibit 13: With rising capex cost, new capacities' EBITDA/t to meet cost of capital has increased



Source: MOSL, Company

- However, despite the sharp reduction in expected RoCE, capacity expansion happened at a fairly strong pace.
- Our analysis suggests that ~66% of the capacity put up over FY15-18 was in the form of high-cost greenfield expansion (typically entail 45% higher capex and generate lower ROCE).

Exhibit 14: Percentage of greenfield and brownfield expansions over the years



Source: MOSL, Company

- Brownfield expansions typically incur capital cost, which is at ~45% discount to the greenfield expansion. The associated return ratios generated are relatively healthy than those generated from greenfield expansions.
- We expect ~47% of the capacity to be added over the next three years to be brownfield (brownfield constituted 34% of the capacity added over FY15-18). To achieve a post-tax ROCE of 12%, with replacement cost of INR7,800/t for greenfield and INR4,300/t for brownfield, the required EBITDA/t should be ~INR2,159/t and INR1,187/t, respectively.

Exhibit 15: EBITDA/t required for incremental greenfield capacities is as high as INR2,159/t to achieve 12% post-tax ROCE

EBITDA/t (INR/t)	2,159
EBITDA at 80% utilization for 1mt capacity (INR mn)	1,727
Capex (USD/t)	111
Capex (INR mn)	7,800
Depreciation at 5% of capex (INR mn)	390
EBIT (INR mn)	1,337
Tax at 30%	
EBIT*(1-t) (INR mn)	936
ROCE	12%

Source: Company

Exhibit 16: EBITDA/t required for incremental brownfield capacities is INR1,187/t to achieve 12% post-tax ROCE

EBITDA/t (INR/t)	1,187
EBITDA at 80% utilization for 1mt capacity (INR mn)	950
Capex (USD/t)	61
Capex (INR mn)	4300
Depreciation at 5% of capex (INR mn)	215
EBIT (INR mn)	735
Tax at 30%	
EBIT*(1-t) (INR mn)	514.8
ROCE	12%

Source: MOSL, Company

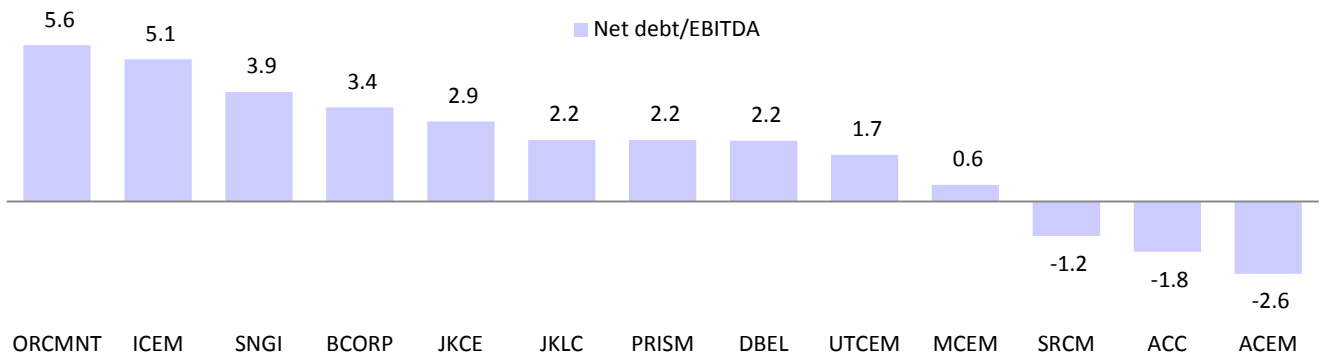
Garnering market share remains the priority

- The rapid increase in company announcements of capacity addition clearly indicates an intention to maintain/ increase market share. The Holcim group — a laggard in capacity addition, has now started focusing on growth, as is evident from its recent capacity expansion plan.
- Intention of companies to diversify into new regions is also gaining visibility with various south-based companies planning to add capacities in central and northern regions.
- India Cements entered into a share-purchase agreement for acquiring the entire shareholding of Springway Mining Private in a phased manner for a total consideration of INR1.8b. The company deems the central region fit for future capacity expansion, given the favorable demand-supply dynamics in the region. Thus, the company has INR10b capex plan to add capacity of 2.3mt in the central region. The company will be starting a clinker plant of 1.5mt in Satna and support grinding units in Satna and Uttar Pradesh of total 2.3mt capacity.
- Sagar Cement announced its expansion plan in Central India by acquiring 65% stake in Satguru Cement Pvt. Ltd to add cement capacity of 1mt in Dhar. It also plans to set up a 1.5mt capacity in Jajpur, Cuttack, by acquiring the entire shareholding of Jajpur Cement Pvt. Ltd (JCPL).
- Dalmia continues its endeavor to become a pan-India player as after its failure to acquire the insolvent Binani Cement, Dalmia has secured mining rights near Chittorgarh and is planning to build a 4mt capacity plant there.

Financial leverage might result in certain slippages in capacities

- We analyzed the balance sheet strength of our coverage companies to understand their ability to incur large capex over the next 2-3 years.
- Net debt to EBITDA for mid cap cement companies is higher than 3.0x of FY19 financials. Midcap cement companies, thus, might face limitations in committing capex due to the cash flow constraints.
- We believe there should be slippages in the capex plans of heavily levered companies like India Cement and Orient Cement. After announcing capex in the central region in 2QFY19, India Cement put the program on hold in 3QFY19, indicating it would wait for sufficient cash flow to be generated. Also, given the current balance sheet and profitability of Orient Cement, we expect slippage in its capex.

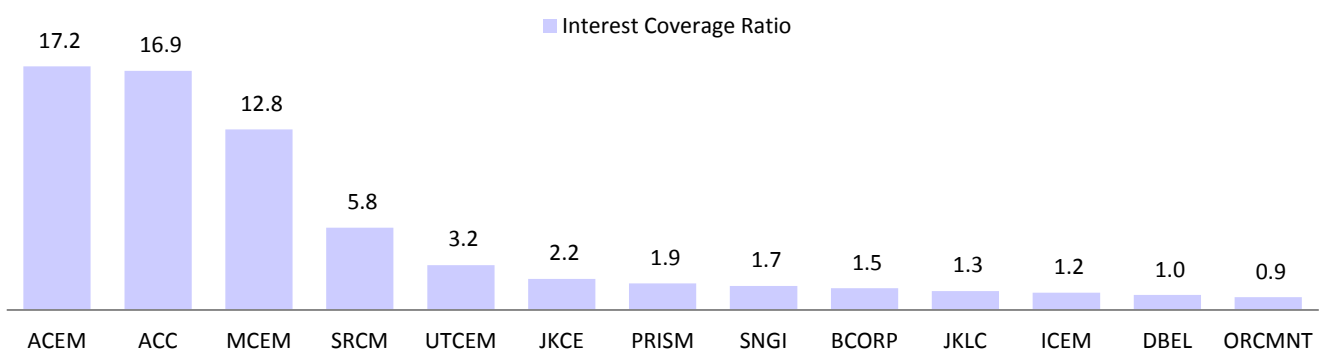
Exhibit 17: Net debt/EBITDA for FY19E



Source: MOSL, Company

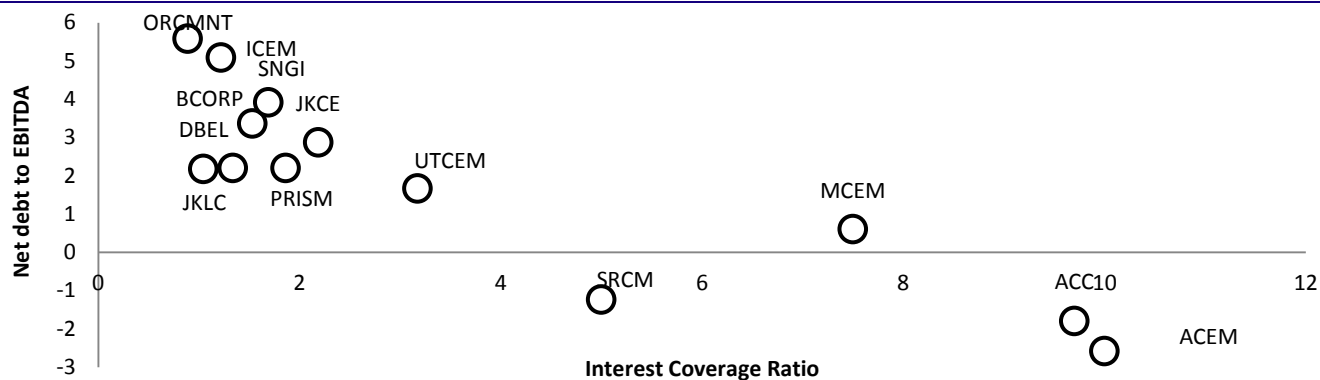
- Also, the interest coverage ratio is >2 only for the large cap cement companies. Therefore, we expect slippages in capacities by the midcap companies.

Exhibit 18: Interest coverage ratio for FY19



Source: MOSL, Company

Exhibit 19: Financial leverage of coverage universe for FY19



Source: MOSL, Company

Valuation and View

We prefer companies with higher exposure to the northern region, as the North is pegged to witness the maximum improvement in capacity utilization. Our top picks to play the North theme are SRCM and JKCE. We also like ACC, which is on a growth capex mode and should witness improvement in profitability.

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NOTES

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

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