Rating Indian Cement Producers

Sector Credit Factors for National Ratings

Special Report

This report is an addendum to the master report, "Corporate Rating Methodology", dated September 2012. The report describes the criteria applied by India Ratings in assigning corporate ratings. This addendum provides a high-level overview of how those criteria are most frequently observed in application to companies in this sector. Users are referred to the "Limitations" section of this report.

Specific Rating Factors: This report addresses the specific credit factors India Ratings and Research Private Limited (India Ratings) uses when analysing Indian cement companies on the Indian National Rating Scale. For the purpose of this report, these entities have operations primarily in cement with a small proportion in aggregates and ready mix concrete, and with their own production facilities.

After highlighting the sector risk profile, the report defines and groups the ratings of companies operating in the sector into a "natural rating territory", based on India Ratings' view of the inherent risk profile of the sector. It then examines additional company-specific traits that may influence the rating and therefore more finely categorise companies by rating level. It also explains how a company's financial profile influences its creditworthiness and final rating.

Sector Risk Profile

Natural Rating Category: Representative companies in this sector are rated between the 'IND AA' category and the 'IND BBB' category. They are exposed to the cyclical construction sector, seasonality, a fragmented industry and high capital intensity.

Entities could be rated 'IND AAA' if they benefit from location advantage with respect to raw materials and customers, geographical diversification, efficient cost structures and/or support from a higher-rated parent. Entities rated 'IND BB' and below typically have inefficient cost structures, constrained access to raw materials or power, uneconomical size of operations and/or weak capital structures.

Cyclical Sector: The Indian cement industry is exposed to cyclicality in end-user industries (primarily residential and construction). This is accentuated by bunching of capacity additions, which drives demand supply imbalances. The industry is also affected by seasonality; demand is generally low during the monsoon season and peaks during the festival period and end of financial year (March to April) as government expenditure rises.

Location Affects Competitiveness: Due to the low value to weight of raw materials and finished products, freight costs make up a significant proportion of productions costs. Manufacturing facilities are therefore located around seven limestone clusters. The most cost-effective transport mode is rail, followed by road (particularly for last-mile connectivity).

Production facilities supply to immediate catchment areas, which may extend to neighbouring states. Increasingly, cement companies have been looking at setting up clinker-grinding facilities closer to end markets to optimise transport costs. Locations with access to fuel or that facilitate development of captive power add to companies' cost competitiveness.

Oligopolistic Cartel Behaviour: The cement industry is capital intensive but the scale threshold is low. This has led to the entry of large numbers of smaller companies, some of which may have relatively uneconomic cost structures. Nevertheless, the top five producers control 50% of total production capacity. Low product differentiation, the large number of companies and high upfront cost limit mutual margin-eroding competition.

Reliant on Coal Availability: Domestic coal is supplied by Coal India Limited (CIL). However, availability is increasingly a challenge due to competition from power. Imported coal is limited to coast-based plants. Ability to manage coal sourcing and its volatility is important for profitability.

Related Criteria

Corporate Rating Methodology (September 2012)

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Building Blocks - Indian Cement

	Sector Risk Profile	Company-Specific Traits			Financial Profile (historical where relevant and forecast, mid-point)			
		Market position	Geographical diversification	Cost position	Total adj. debt net of cash/ EBITDAR (x)	EBITDAR interest coverage	CFO/Revenue midpoint (%)	Operating EBITDAR margin (%)
IND AAA					>1	>8		
IND AA		• Top 3 player by market share in core markets where it operates	• Significant presence in at least two or more regions, or ability to cater to other regions due to freight advantage • Medium revenue concentration, with revenue from one single region or geographical zone of <50%	• 80% or above power needs met through captive power and availability of coal linkage • Limited exposure to volatility in imported coal prices • Backward integration with production facilities close to raw material sources. Limited expense on inter-unit clinker transfer • Low lead distance for outward freight	<3	>6	20	25
IND A		• Top 5 player by market share in core markets where it operates	• Multiple plants in a single region • Single clinker production plant of sufficient size together with multiple optimally located clinker grinding plants • Revenue concentration of 50%-80% in one region	• 60% to 80% above power needs met through captive power and availability of coal linkage • Dependence on Diesel for <20% of requirements. Partial backward integration leading to majority of production facility in close vicinity of raw material sources • Limited expense on inter unit clinker transfer	3.5	4	15	20
IND BBB		• Weak market position in market where it operates	• Single or multiple plants with high geographical concentration and/or uneconomical size of operations • High revenue concentration, with revenue from one single region or geographical zone >80%	• High dependence on merchant power • Absence of long term contracts facilitating assured supply of fuel • Limited control on freight cost. Margins have high exposure to volatility of market freight rate. High dependency on road transportation as against rail transportation.	4.5	2.5	10	15
IND BB & below					<5	<2	<10	<15

General

- High barriers to entry
- Oligopolistic industry structure allowing pricing power and supply discipline
- Essential products
- Capital intensive
- Cyclical industry
- Seasonal demand
- Regional/geographical diversification

Indicative factors observed or extrapolated for rated issuers. Ratio levels refer to the mid-point of a through-the-cycle range; actual observations are likely to vary from these. Certain sub-sectors may contain a small number of observations; where no observations currently exist, guidelines for a category are extrapolated based on India Ratings judgement. The factors give a high-level overview and are neither exhaustive in scope nor uniformly applicable. Additional factors will influence ratings, particularly where group relationships constrain or enhance a rating level.

Key Credit Factors

- Market position and barriers to entry
- Geographical diversification
- Cost position
- Financial profile
- Regulatory risks

Company-Specific Traits

Rating Categories

India Ratings examines a number of sector-specific qualities and outlines rating categories for companies that display these characteristics under company-specific traits.

It is rare that a company will track to the same rating category for every trait or ratio. Although rating committees take all factors into consideration, they will weight some of the factors more heavily than others, such as the operating cost position, liquidity and financial profile. India Ratings also considers the current industry dynamics for a given commodity, which it discusses annually in its industry Outlook Reports.

Location-Driven Competitive Advantages

As cement manufacturing in India is restricted to raw material clusters, certain regions remain favourably placed in terms of demand and create natural barriers to entry through transport costs. Reductions in freight costs due to location give a long-term competitive advantage to companies and act as a natural barrier to entry for new competition. The need for uninterrupted access to sources of fuel or resources for generation of captive power, driven mostly by availability of coal from CIL, creates a further barrier to entry of new players.

Large companies in the Indian cement industry tend to have some or most of these advantages. Such companies usually attain leadership positions in their markets. India Ratings assesses each company's market position in its region as it influences strength in price-setting, which in turn affects cash flow generation. Development of higher value-added products also increases the degree of technical expertise required, limiting the entry of potential new competitors.

Geographical Diversification and Regional Dynamics

India Ratings considers geographical diversification an important rating factor. It can help an issuer mitigate the effects of a decline in construction activity in a particular region, as construction cycles may vary across markets.

The agency assesses degree of geographical diversification by number of production facilities across the regions in the country, the balance of revenue generated in low‐ and high‐growth regions and the degree of concentration or diversification of revenue in a region. India Ratings also analyses the diversification split based on cash flow and profit generation. The balance of revenue generated in low‐ and high‐growth markets may influence the stability of cash flows.

Figure 1
Geographical Diversification

Observations	Production facilities	Revenue concentration
'IND AA'	Significant presence in at least two or more regions, or ability to cater to other regions due to freight advantage	Medium revenue concentration, with revenue from one single region or geographical zone of <50%
'IND A'	Multiple plants in a single region provide moderate diversification. Single clinker production plant of sufficient size together with multiple optimally located clinker grinding plants.	Revenue concentration of 50%-80% in one region with balance distributed across other regions.
'IND BBB' and below	Single or multiple plants with high geographical concentration and/or uneconomical size of operations.	High revenue concentration, with revenue from one single region or geographical zone of more than 80%.

Source: India Ratings

India Ratings balances the benefits of a broad geographic diversification against the risks related to expansion into lucrative regional markets, which can involve large capital requirements and integration risks associated with acquisitions.

Operating Cost Position

In common with companies in other cyclical and commodity industries, cement producers rely for their long-term competitiveness on low production costs. Low-cost producers generate higher cash flows/profit margins than more marginal producers at all price levels and have positive cash flows for longer periods during cyclical downturns. Low-cost producers may also maintain production volumes during downturns when higher-cost producers may reduce production volumes or idle their operations.

The cost of cement is largely governed by energy costs including that of coal, and the extent of use of fly ash and slag in the product mix used for blending. Depending on fuel access efficiency, this cost is 25%-37% of total expenses. Financially stronger companies are better positioned to invest in more efficient captive power units or enter into long-term contracts to ensure coal supply from either domestic or international sources. Strong companies with captive power facility backed by coal links (or long-term coal import contracts) incur 15%-20% less cost on fuel per unit of production than the median players.

Freight cost is the other critical operational cost. Consequently, depending on proximity to raw material sources, distance from end markets and transport choice mix (rail, road or waterways) this cost accounts for 17%-27% of total expenses. Most of the cement manufacturers are located close to limestone mines but are increasingly establishing grinding facilities closer to the end market to optimise freight costs.

Figure 2
Cost Position of Companies

Observations	Power and fuel cost drivers	Freight cost drivers
'IND AA'	80% or above power needs met through captive power and availability of coal. Merchant power accounting for less than 20% of requirements. Limited exposure to volatility in imported coal prices.	Backward integration with production facilities close to raw material sources. Limited expense on inter-unit clinker transfer. Low lead distance for outward freight.
'IND A'	60%-80% of power needs met through captive power, or available coal. Dependent on diesel for less than 20% of requirements.	Partial backward integration leading to majority of production facilities close to raw material sources. Limited expense on inter-unit clinker transfer.
'IND BBB' and below	High dependence on merchant power, absence of long-term contracts facilitating assured supply of fuel	Limited control of freight cost. Margins have high exposure to volatility of market freight rates. High dependence on road transport rather than rail.

Source: India Ratings

Financial Profile

India Ratings' Master Criteria *Corporate Rating Methodology* (see link under *Related Research*) lists the main ratios used in rating companies, and explains adjustments for features such as operating leases and pensions. In the agency's financial analysis of the building materials sector, the ratios discussed below differentiate company ratings. Their relevance is tied to the company-specific traits highlighted in *Company-Specific Traits* above.

Financial metrics can only alleviate some sector and company trait risks even where, for example, financial leverage is very low. However, a weak financial profile (such as liquidity issues, high leverage or low interest cover) would be likely to put pressure on the rating, and lead to a final outcome in a lower rating category. In a "weakest link" analysis, financial factors can outweigh strong business and sector characteristics.

Leverage and Coverage Ratios

Leverage is a key factor in analysis of building materials companies' long-term creditworthiness

and solvency due to the sector's high capital intensity. India Ratings analyses leverage ratios including net debt (net of cash and cash equivalents)/EBITDAR and EBITDAR/interest coverage. In addition to EBITDAR-based leverage and coverage ratios, India Ratings focuses on funds from operations (FFO)-based ratios. FFO is a measure of the ability to generate operational cash after interest and tax, before working capital and before investments.

Figure 3
Leverage and Coverage Ratios

Observations	Total adjusted debt net of cash/EBITDAR	EBITDAR interest coverage ratio
'IND AAA'	<1	>8
'IND AA'	1-3	>5-8
'IND A'	3-4	3-5
'IND BBB'	4-5	2-3
'IND BB' and below	>5	<2

Source: India Ratings

Cash Flow and Liquidity

In assessing debt repayment and re‐investment capability, India Ratings analyses an issuer's capacity to generate cash flow from operations (CFO). The agency considers internal cash generation a more robust credit protection measure than external sources of capital.

Figure 4
Cash Flow

Observations	CFO/revenue mid point (%)
'IND AA' and above	20
'IND A'	15
'IND BBB'	10
'IND BB' and below	<10

Source: India Ratings

Free cash flow (FCF) provides an indication of management's strategy and appetite for credit risk. The agency would generally expect companies rated 'IND AA' and above to fund capex and dividends from internal sources across the cycle, and to consistently generate positive FCF. Speculative-grade companies typically have negative FCF during downturns. India Ratings distinguishes discretionary from non-discretionary (maintenance and committed) capex in assessing a company's flexibility to scale down investment during a downturn. Building materials companies generally keep capex at or above their annual depreciation charge.

In its analysis of liquidity, India Ratings compares FCF, available cash and undrawn committed facilities against short-term debt-service requirements. The agency generally expects entities rated in the 'IND AA' and above categories to have limited volatility through the cycle, reflecting management's ability to maintain financial flexibility through cash preservation measures and to maintain access to external funding during downturns.

Profitability

Profitability levels and trends serve a number of analytical functions. For example, they can be an indicator of a different sales mix, with each activity having distinct risk and margin thresholds, and several operational factors (consistently high absolute and relative profitability can indicate a low operating cost position, while declining margins over time may indicate rising costs of production). They also set the pattern for cash flow dynamics.

As with cash flow margins, profitability margins can vary widely among building materials issuers. Cement manufacturers report the best margins, usually followed by aggregates companies.

Figure 5
Profitability

Observations	EBITDAR margin mid point (%)
'IND AA' and above	25
'IND A'	20
'IND BBB'	15
'IND BB' and below	<15

Source: India Ratings

In analysing profitability India Ratings attempts to measure sustainable earnings (i.e., excluding one-off income) and takes into account the stage of the cycle in which the industry is operating.

Regulatory Risks

The cement industry is exposed to risks related to regulations governing land acquisition, mining rights and environmental clearances. The risks predominantly affect greenfield projects but brownfield ones are not immune. India Ratings views companies that begin projects without securing the necessary captive raw materials as inherently riskier.

Limitations

This Sector Credit Factor report describes indicative features for rated issuers in India. Ratio levels refer to the mid-point of a through-the-cycle range, and as a result actual observations are likely to vary from these. The weighting factors will vary substantially over time for a given issuer and among issuers depending on relative significance agreed on by the rating committee. The factors described give a high-level overview as a convenience for rating users, and are neither exhaustive in scope nor uniformly applicable. They may vary for a given rating category.

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