

# Rating Methodology - Cement Industry

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## Industry Overview

India is the second-largest cement producer after China. India is also the second-largest cement consumer across the globe. The cement industry, part of the manufacturing sector, plays a pivotal role in the infrastructure development of the country. The industry growth rate is positively correlated with GDP growth rate of the country. In terms of quality, technology, productivity and efficiency, India compares well with the best in the world and is the second-fastest growing cement market across the globe.

## Rating Methodology

CARE Ratings has a detailed methodology for rating of companies belonging to the manufacturing sector. CARE's rating process begins with the evaluation of the economy/industry in which the company operates, followed by the assessment of the business risk factors specific to the company. This is followed by an assessment of the financial and project-related risk factors as well as the quality of the management. This methodology is followed while analyzing all the industries that come under the purview of the manufacturing sector. However, considering the size and diversity of the manufacturing sector, CARE Ratings has developed methodologies specific to various industries within the sector. These methodologies attempt to point out factors, over and above those mentioned in the broad methodology, which are considered while analyzing companies belonging to a particular industry. The following are such additional factors, along with their analytical implications, considered by CARE while arriving at the rating of the players that operate in the cement industry.

### **Regional demand-supply dynamics, plant location and freight costs:**

Cement, being a low-value, bulky commodity, is unviable to transport across the country due to high logistic costs. Therefore, the domestic cement industry is divided into five geographical regions, viz., North, South, East, West and Central, each region characterized by its own demand - supply dynamics. The industry is influenced by regional rather than national demand-supply

dynamics. Also, the cement industry, unlike other industries, is relatively insulated from global demand-supply and pricing dynamics with negligible imports and moderate exports.

Owing to the varying levels of infrastructure/real estate/industrial development in different regions, companies operating in developing states/regions are better placed. To some extent, there is also an inter-regional movement of cement within regions. The rating of the companies present in surplus regions will get influenced by their locational disadvantages as they will be highly vulnerable in case of any downward trend in demand.

Cement plants are generally clustered either near limestone reserves (raw material source) or near the end-user markets. There are seven limestone clusters identified in the country of which three clusters are located in the Southern region. CARE examines the long-term mining rights that the company possesses with respect to the adequacy of the reserves for the company's current and future operations. Apart from royalty and lease rent, the cost of limestone is also dependent upon its availability at surface level, quality and transport charges to plant location. Companies also have split location plants whereby clinkerization plants are near to limestone reserves and grinding units are in proximity of end-user market. Average market radius to which the company caters to is analyzed. By adopting this strategy, companies can minimize freight costs (clinker can be transported in open wagons thereby reducing freight cost).

Freight cost accounts for about 20%-25% of the operating cost. Cement can be transported through rail, road or sea route. Rail transport, which forms about 35% of the total cement dispatches is cheaper than road transport if cement is transported over long distances and in bulk. Also, companies benefit if they have their own wagons and railway sidings. Road transport is advantageous while transporting cement over short distances as it does not involve secondary freight and handling cost. Road transport accounts for a lion's share of about 60% of the total cement movement in the country.

Sea transport is cheapest among the three and is advantageous for companies having plants near coastal line and dedicated jetties. These plants can service markets which are beyond their hinterland due to the cheap accessibility provided by sea transport to other port-based markets.

***Cement companies catering to a particular region may face concentration risk due to decline in cement demand in that region resulting in low capacity utilization and hence companies having multi-locational plants with pan-India presence are superior in a credit perspective.***

***While analyzing cement companies, CARE also examines the proximity of cement plants to the raw material source/end-user market. CARE Ratings favorably views companies having cement plants near limestone reserves with long-term mining rights and studies the ability and track record of the company to source other RMs from open market at competitive prices. Also, companies having either split location plants or plants spread across geography especially in cement-deficit states are in a more advantageous position compared with others. Furthermore, CARE Ratings also analyzes the transport mode used by the companies for dispatching cement and favorably views companies using a judicious mix of the same to reduce freight cost.***

### **Operating Efficiencies:**

As cement is a low-value item, in most cases the pricing is not in the hands of the manufacturers and hence cost control is an important aspect for maximizing profits. Size is one of the aspects which is analyzed. Large cement plants enjoy better economies of scales with respect to the operational costs and overheads.

Vintage of cement plants is also an important aspect which impacts the costs. Older cement plants were initially based on wet process but the modern plants invariably adopt the dry process except in rare cases where the raw material characteristics may demand for wet or semi-dry process. The dry process is superior in terms of fuel economy and is cost efficient and therefore is widely used. Majority of the older wet process plants have moved to dry process which is economically viable. New plants are preferred to old plant due to low operating costs. Furthermore, companies with advance systems resulting in production economies are preferred.

In addition of freight costs, power and fuel cost is one of the key cost components accounting for about 20%-25% of the operating cost. Cost of captive power can be much lower than grid power if such a plant is working on low cost and easily available fuels. Coal and Pet Coke are the most common fuels used for the kiln burning. Companies with established coal linkages are viewed favorably. CARE also assesses the various means of coal procurement, i.e., imports, domestic coal, e-auction adopted by the companies. Cement companies with firm domestic coal linkages are in a better position when compared with companies whose reliance on imports and e-auctions are more. Apart from cost, uninterrupted supply of quality power is also essential for

better operating efficiency. Companies using alternative fuels like rice husk, groundnut husk, chemical waste, etc., for kiln firing and captive power generation are at an advantageous position.

***CARE Ratings favorably views companies having own captive power plants operating on low cost and easily available fuels or manufacturing units set up in low power tariff states. Power and Fuel cost/MT is analyzed for the same. Furthermore, power consumption norms like kWh/MT of cement are also analyzed for better understanding. Also, emphasis is given to the scale of operations and vintage of plant.***

### **Capacity Expansion:**

The cement industry is a cyclical industry and projects have a long gestation period. Companies can enhance capacities either through Greenfield/Brownfield expansions or through acquisitions. The rating methodology takes into account the management's past track record of executing projects with a judicious mix of debt and equity components and within time and cost estimates. ***While examining expansion plans, CARE Ratings forecasts the regional demand-supply situation at the time of project completion and analyses its impact on the company's financials and future cash flows. In case of inorganic growth, CARE analyzes the cost of acquisition vis-à-vis benefits of synergies.***

### **Product Mix & Branding:**

India was earlier mainly into Ordinary Portland Cement (OPC). Gradually, it has now moved towards the blended cements. Blended cements like Portland Pozzolana Cement (PPC), Portland Slag Cement (PSC) & Portland Blast Furnace Slag Cement (PBFSC) enjoy majority of the market share today as they have more comprehensive strength, are more environment friendly, have wider applications and have lower production cost as the limestone requirement is low for blended cements and also results in cost savings with respect to freight and power.

Branding can aid companies realize price premium. It also helps companies maintain their market share during lean phase. Companies investing in advertising, marketing & extensive dealer network to create brand awareness reflect the management's long-term vision and product positioning strategy.

***CARE analyzes the company's product mix, blending ratio and the cost benefits accruing from the same. Further, while assigning rating to a cement company, CARE also analyzes selling and distribution expenses and favorably views companies which are investing in brand promotion. Also, the company with an already established brand commanding a price premium over its peers is also viewed favorably.***

### **Government Intervention:**

Over the years, the industry has moved from a phase of government determining capacity, production and pricing to a fully decontrolled stage in 1989. However, the industry is still susceptible to governmental actions like change in imports duty, ban on usage of pet coke, price freeze pact, etc. ***Companies with better operating efficiency, wide market access and experienced management are at an advantageous position to deal with such situations.***

### **Key ratios:**

Some of the important cement industry-specific indicators covered in the analysis are:

- Total cost/MT
- Power cost/MT
- Freight cost/MT
- PBILDT/MT
- kWh/MT (For power consumption)
- Blending ratio
- Total debt/Installed capacity (per MT)
- Debt/PBILDT
- Operating margin

### Conclusion

The rating outcome is ultimately an assessment of the fundamentals and the probabilities of change in the fundamentals. CARE Ratings analyzes each of the above factors and their linkages to arrive at the overall assessment of credit quality by taking into account the industry's cyclicity. While the methodology encompasses comprehensive technical, financial, commercial, economic, and management analysis, credit rating is an overall assessment of all aspects of the issuer.

[For previous version please refer 'Rating Methodology - Cement Industry' issued in [May 2019](#)]

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