

Rating Methodology - Cement Industry

[In supersession of “Rating Methodology - Cement Industry” issued in [June 2017](#)]

Industry Overview

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.

Cement demand is primarily derived from real estate, infrastructure & industrial sectors. The performance of the cement industry is therefore largely dependent on overall economic growth of the country.

India is the second largest cement producer after China with production capacity of around 455 million tonnes. India is also the second largest cement consumer across the world. However, per capita cement consumption is abysmally low compared to developed nations.

The Indian cement industry is somewhat fragmented. The industry has around 210 large cement plants and over 350 mini cement plants. As of now, the top 10 cement companies account for around 60-65% of the cement market. The top two groups viz. the Aditya Birla group and the Lafarge Holcim group control around 1/3rd of the the total cement production capacity in the country. However, since FY14, the industry witnessed consolidation with existing large players as well as foreign players like Lafarge Holcim, Italcementi, etc. taking-over assets of both regional as well as large players. The industry witnessed consolidation with some large domestic players acquiring units from other industrial groups. Additionally, stressed assets are also being acquired by larger players. The trend is expected to continue and the expected future capacity addition would be in the form of brownfield expansion in these acquired assets. Acquiring cement assets is cost affective for the acquirer and provides access to new market and a ready-made supplier network. Further, the industry has witnessed entry of new players such as Emami, Nirma, Adani Cementation among others.

The industry is highly capital and energy intensive. As witnessed in the recent past, the average cost for setting up a greenfield integrated project has been around USD 90-110/MT.

In terms of power requirement, the total power requirement is around 65-85 kWh/ton of cement.

Cement can be produced through three basic processes - wet process, Semi-dry/semi-wet process and dry process. 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.

The industry produces a wide range of cement varieties which includes Ordinary Portland Cement (OPC), Blended Cements and Special cements (white cement, sulphate resistant cement, rapid hardening cement, oil well cement). Blended cements like Portland Pozzolana Cement (PPC), Portland Slag Cement (PSC) & Portland Blast Furnace Slag Cement (PBFSC) have majority of the market share today as they have more comprehensive strength, are more environment friendly and have lower production cost as compared to OPC.

Cement, being a bulky commodity, is unviable to transport across the country due to high logistic costs. Therefore, the industry gets divided into five geographical regions viz. North, South, East, West and Central, each region characterized by its own demand - supply dynamics. Also, the cement industry, unlike other industries, is relatively insulated from global markets with negligible imports and moderate exports.

Cement plants are clustered near limestone reserves (raw material source). There are seven such clusters identified in the country of which three clusters are located in the Southern Region.

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.

Location of plants:

Cement is a low-value, high-volume commodity and transporting it over long distances increases freight cost. This makes it imperative for companies to have cement plant either near limestone reserves or near the end-user market. Companies also have split location plants whereby clinkerisation plants are near to limestone reserves and grinding units are in proximity of end-user market. By adopting this strategy, companies can minimize freight costs (clinker can be transported in open wagons thereby reducing freight cost).

While analyzing cement companies, CARE examines the proximity of cement plants to the raw material source/end-user market. Also companies having either split location plants or plants spread across geography especially in cement-deficit states are in a more advantageous position compared to others.

Operating Efficiency:

Power & Fuel

Power and fuel, used for clinker grinding and kiln firing respectively, 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.

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.

Freight

Freight cost accounts for about 20%-25% of operating cost. Cement can be transported through rail, road or sea route. Rail transport, forming about 35% of 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 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.

CARE Ratings analyses the transport mode used by companies for dispatching cement and favorably views companies using a judicious mix of the same to reduce freight cost.

Raw Material (RM)

RM cost mainly consists of costs for limestone, gypsum and fly ash. RM cost accounts for nearly 20%-25% of operating cost. OPC comprises 95% limestone and 5% gypsum (volume wise) and fly ash/slag are used in blended cements. As

limestone requirement is substantial, CARE examines the long-term mining rights that the company possesses with respect to the adequateness 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. Fly ash/slag is sourced from steel or power companies at relatively low price, hence cost of the same mainly includes transport cost to the plant location (which in turn depends on distance from source). To maintain sufficient and timely supply of fly ash/slag, cement companies are looking at JVs with power/steel companies. ***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.***

Regional demand-supply dynamics

Considering the bulky nature of the product, the industry is influenced by regional rather than national demand-supply dynamics. Due to 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 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 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.

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 takes into account the management’s past track record

of executing projects with a judicious mix of debt and equity components and without any cost/time overruns as critical success factors. The fragmented nature of the cement industry in India represents an opportunity for inorganic growth for cement companies. Consolidation is good for the industry as it brings pricing discipline and weeds out unnecessary competition. The timing of the capacity enhancement is of critical importance for any company. ***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 analyses the cost of acquisition vis-à-vis benefits of synergies.***

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 excise duty, 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.***

Branding

Branding is a relatively new development in the cement industry and 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. While assigning rating to a cement company, CARE Ratings analyses 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.

Conclusion

The rating outcome is ultimately an assessment of the fundamentals and the probabilities of change in the fundamentals. CARE Ratings analyses 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.

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