



ICRA Rating Feature

Rating Methodology for Entities in the Cement Industry

Overview

This rating methodology updates and supersedes ICRA's earlier methodology note on the sector, published in May 2017. While this revised version incorporates a few modifications, ICRA's overall approach to rating entities in the sector remains materially similar.

The methodology aims to help issuers, investors and other interested market participants understand ICRA's approach to analysing risks that are likely to affect rating outcomes in the cement industry. This document does not include an exhaustive discussion of all the rating factors that our analysis considers, but provides an overall perspective of the considerations that are usually the most important.

Industry Background

The Indian cement industry is the second largest in the world, with a total installed capacity of around 475 million tonnes per annum (MTPA) as on March 31, 2019 and cement production of 337 million metric tonnes (MMT) in FY2019. The industry occupies an important place in the national economy because of its strong linkages to other sectors such as housing, infrastructure and roads.

The cement sector exhibits high cyclicity, driven by the lumpiness in the capacity additions on the supply side. The cement demand has witnessed moderate growth, largely in the range of 5%-8% in the last decade, except for two years of double digit growth and one year of de-growth (in FY2017), which was due to demonetisation. The industry is relatively insulated against global trends as the large freight component makes imports unviable. Thus, the competition in the Indian cement industry is largely restricted to domestic manufacturers. ICRA has observed that while no Indian cement entity is immune to the cyclicity inherent in this business, companies with strong fundamentals are able to withstand the cyclicity better as compared to others. In addition to industry risks, ICRA's rating methodology analyses entity-specific drivers such as locational attributes, the extent of proximity to consuming markets, cost efficiencies arising out of access to key inputs at competitive prices, and operating efficiencies for assessing the business risk profile.

Rating Methodology

Following are the key rating drivers that are assessed to assign ratings to the entities in the sector:

- **Industry Risk Drivers**
 - Regional demand-supply scenario
 - Government policies
- **Business Risk Drivers**
 - Scale of operations
 - Geographical diversification
 - Vintage of the plant, cost efficiencies and logistics
 - Brand strength and marketing
- **Financial Risk Drivers**
 - Profitability margins
 - Capital structure, leverage and debt coverage indicators

- Liquidity & financial flexibility
- Tenure mismatches, and risks relating to interest rates and refinancing
- Contingent liabilities/off-balance sheet exposures

- **Management Quality and Corporate Governance**

- **Parentage**

Industry Risk Drivers

Regional demand-supply scenario

Cement being a bulky low-value commodity is highly freight sensitive. A bulk of the cement produced within a region is usually consumed within the region itself, with the excess transported to adjacent regions. Thus, price trends and capacity utilisation levels in the cement industry are determined more by regional supply-demand dynamics than by the national supply-demand balance. Therefore, while rating a cement manufacturer, ICRA focuses on assessing the likely demand-supply scenario in the region in which the entity operates.

While projecting demand, ICRA takes into account past trends, the underlying economic growth drivers, and the cement-intensity of infrastructure projects planned and being implemented in the region. The Government policies relating to rural and urban housing, infrastructure and roads development have a direct impact on the cement demand. ICRA expects the cement demand to increase moderately in the range of 7% - 8% over the next two years.

On the supply side, ICRA attempts to project the likely supply position by looking at greenfield and brownfield expansion plans of manufacturers, besides low-cost supply additions through debottlenecking of existing capacities and blending¹. Given the long gestation period for a greenfield capacity addition, the cyclicity in the sector mainly arises on account of the bunching up of the capacity addition on the supply side, whereas the fluctuation in demand may not be significant.

The domestic cement industry, which has traditionally been fragmented, has seen some consolidation of late, following several mergers and acquisitions. Such consolidation has also brought in a degree of supply rationalisation among manufacturers. As a result, cement prices tend to be steady despite significant supply pressures over the past few years. Thus, while rating a cement manufacturer, ICRA also takes into consideration the degree of consolidation that exists in the region(s) concerned, as that determines the extent of supply rationalisation and the intensity of pricing pressures.

Government policies

The government's direct role in the sector relates to the auction of key raw material, limestone and on the incentives provided on setting up of capacities in the North East.

On limestone: The auction of limestone mines is governed by the respective states, whereas royalty rates on limestone are notified by the Central Government. ICRA evaluates the impact on the contribution margins of the cement players on account of the increase in the royalty rate of limestone, given the commoditised nature of the product.

On incentives for the North East: The Government of India gives incentives for investments in the North East region with a purpose to boost industrial activities in the region. As of now, the North East Industrial and Investment Promotion Policy, 2007 (NEIIPP 2007) is in place, which was formulated for 10 years. The companies from this region benefit from exemption of taxes and duties, freight subsidy and capital investment subsidy. After the expiry of the incentives, the profitability of the players in this region would be adversely impacted due to higher costs.

¹ Clinker capacity is often a constraint in the production of cement. Blended cements are a blend of portland cement and a combination of any one or more supplementary cementing materials, such as slag cement, silica fume, or fly ash.

Business Risk Drivers

Scale of operations

The scale of operations for cement companies is measured in terms of revenues derived from sales volumes. Larger capacities result in a better cost structure (with better control over infrastructure and overhead expenses) and offer the benefit of economies of scale for larger players.

Geographical diversification

The price trends and capacity utilisation levels in the cement industry are determined by regional supply-demand dynamics and the exposure to supply-demand volatility for a cement entity catering to one region would be high. ICRA takes a favourable look at manufacturers with plants in different regions, as the geographical diversification usually allows players to better cope with the regional demand-supply volatility.

Vintage factor of the plant, cost efficiencies and logistics

The key metric for a cement entity, OPBIDTA/MT is dependent on net cement realisation and the cost structure of an entity. Cement being a commodity item does not allow much premium pricing and thus most manufacturers are price takers in the markets they operate in. In such a scenario, control over operating expenses is essential not only to maintain cost competitiveness and maximise profitability, but also withstand cyclical downturns, and is, therefore, one of the most important rating determinants. The cost structure of a cement entity is driven by locational economics, freight costs, power and fuel costs and blending ratio.

Locational economics, logistics and freight costs - The bulk of India's cement production capacity is concentrated in a few clusters, which are essentially regions where limestone is widely available, however, the major consumption centres are often states that are far away from these production centres. ICRA favourably views the entities that optimise the distance of the cement plants from the source of raw materials and the major consumption centres, and this supports the profitability over the long term on the strength of lower freight expenses.

In analysing the locational economics, ICRA also evaluates the strategies adopted by individual entities to offset their locational disadvantages, if any. One strategy, for instance, is to set up stand-alone grinding units close to the consuming markets and the clinker unit near the limestone quarry. This helps the manufacturers save the freight cost as clinker can be transported in open wagons or trucks. The benefit of this arrangement is even more marked in case the grinding unit is located close to a source of additive such as fly-ash or slag. Thus, ICRA assesses the entity's policy on setting up an integrated cement plant vis-à-vis having grinding units and clinker units at different locations and the cost versus benefits of the entity's approach.

Cement manufacturers use a mix of rail, road and coastal sea transport to distribute their products. While rail transportation is more economical over longer distances, for shorter hauls road transportation is more cost-effective and reliable. Coastal sea transportation of cement, as on date, is limited in India because of the limited availability of infrastructure and is largely confined to supplies by shore-based manufacturers in Gujarat to Mumbai and its neighbourhood. ICRA assesses a manufacturer's logistics development efforts in terms of reliability and cost.

Power and fuel costs: The major operating cost head for cement companies (apart from freight) is power and fuel. These expenses in turn depend on two factors: the consumption norms, and the cost per unit of input consumed. Thus, ICRA analyses consumption norms such as kCal/kg clinker (fuel consumption), kwh/kg clinker (power consumption) and kwh/MT cement produced for the manufacturer being rated. Since the power consumption norms for cement production can vary depending on the product mix, these are analysed with suitable adjustments to assess the efficiency. ICRA also assesses the manufacturer's efforts at reducing input costs through measures such as setting up captive power plants. In case of captive thermal power plants, ICRA assesses the adequacy of the fuel supply arrangements. The availability of domestic coal linkage is viewed favourably by ICRA as against imported or e-auction coal.

Vintage factor of the plant – The vintage of a cement plant also influences its cost structure significantly. While an older plant enjoys the advantage of lower capital cost, such benefit is usually offset by higher power and fuel costs, significant repair and maintenance expenses, and generally higher manpower expenses.

Blending - Ordinary Portland Cement (OPC) accounts for one-third of India's cement production and is widely used in the construction industry. Recently, cement companies have been popularising the use of blended cement/ Portland Pozzolana Cement (PPC), with the result that the proportion of PPC in the total production has increased over the years. The cost of production of PPC is lower vis-à-vis OPC as the cost of additives such as fly-ash and slag (which are used in the production of PPC) is usually lower than the cost of clinker. Further, PPC allows a manufacturer to produce more cement using the same amount of limestone and clinkerisation capacities. Therefore, ICRA views favourably those companies with a demonstrated ability to develop and sell blended products, as also special products such as oil well cement, railway sleeper cement, and sulphate resistant cement, in addition to the OPC.

Other parameters – The capacity utilisation of a cement entity is important given the high fixed costs. ICRA assesses the capacity utilisation of the cement unit in comparison with the peers in its region of operations. While high capacity utilisation is a positive attribute which results in a better cost structure, it is seen in relation to the regional average.

Brand strength and marketing

Brand equity remains a largely regional factor (given that sales are regional), with some local players enjoying considerable brand equity in their areas of operations. ICRA views favourably sustained efforts by manufacturers towards brand development, as brand strength allows market acceptance in the long term. ICRA looks at the market share of an entity across geographies while assessing its brand strength and market presence.

Financial Risk Assessment²

Apart from the operational risk profile, the rated entity's financial profile is also an important consideration from a credit perspective. While ICRA believes that the strong operational profile drives a strong financial profile in the long-term, however, the financial profile of the entity is also governed by the risk appetite and growth plans of the management. Accordingly, while assessing the financial risk profile, apart from the past and the current financial position, ICRA also takes note of the growth plans of the entity, the likely price movement, the volume growth and its impact on the financial position in future. The past and the current financial position can be analysed by the financial statements of the entity, financial ratios and suitable adjustments in accounts to align them with accounting principles and also make them comparable for meaningful peer comparison. Since the prime objective of the rating exercise is to assess the adequacy of the entity's debt-servicing ability, ICRA draws up projections on the likely financial position of the entity under various scenarios of capacity utilisation and contribution margins (which are analysed based on the outlook on the cost structure and sales realisations). Besides, ICRA takes into account the commitments of the entity towards other group companies, and its investments in new ventures.

Profitability

Given the commoditised nature of cement and market participants being price-takers, profitability of a cement manufacturer is primarily a function of its cost structure and product mix. However, since cement is a cyclical industry the profitability of the companies in this industry varies significantly along the cycle. Nevertheless, producers having cost structures better than the industry median level can generally be expected to remain profitable across cycles. The profitability margins in terms of ratios like OPBDITA/OI (Operating profits before depreciation, interest and amortisation / Operating Income) and PAT/OI (Profit After Tax / OI) are seen in relation to changes in OPBDITA/MT of cement sold. The revenue and various cost items are analysed based on per MT of cement sold and produced to ascertain the reasons for changes in the profitability and these parameters. They are also compared with relevant peers in the market to ascertain the reasons for efficiency/inefficiencies.

² Refer to [ICRA's approach for Financial Ratio Analysis](#) for more information on ICRA's assessment of financial ratios

Higher OPBDITA margins are also seen in relation to the return on capital employed (RoCE³). While the entity may have an OPBDITA margin similar to or better than the industry average, but in case the RoCE is lower, then the reasons for the same are analysed, which could be a lower fixed asset turnover than the industry average.

Capital structure, leverage and coverage metrics

The cement industry is highly fixed capital intensive in nature and the companies that pursue an aggressive financial policy, including heavy reliance on debt financing, are likely to be more vulnerable to cyclical downturns than companies that have a lesser degree of financial leverage in their business. ICRA takes into account the financing pattern of long-term and short-term assets with reference to the entity's long-term and short-term debt.

Some of the key indicators assessed by ICRA include –

- Leverage indicators: Total Debt/Tangible Net Worth, Total Outside Liabilities/Tangible Net Worth, Total Debt/OPBDITA, Net Cash Accruals/Total Debt
- Debt coverage ratios: Interest Coverage, DSCR

Liquidity & financial flexibility

The cement industry is not significantly working capital intensive as the inventory levels and the credit period to the dealers is generally limited. Hence, the short-term funding requirements are limited. For an entity with an operational project, ICRA assesses liquidity by analysing the short-term funding requirement vis-a-vis short-term availability of resources such as unutilised bank/credit limits and cash balances. ICRA also evaluates its financial flexibility - the entity's relationships with banks, financial institutions and other intermediaries.

While an entity may have DSCR >1 over the projected period, despite a satisfactory DSCR, the entities, which are experiencing high growth may find themselves stretched on liquidity as their incremental funding requirements may be much higher than the cash generation. In such cases, ICRA analyses the sufficiency of the cash accruals (after meeting scheduled repayment) to fund the targeted growth. The funding requirements can partially be met through additional debt, however, even in such a scenario, the lenders seek at least the margin funding from the borrowers. Hence if the projected levels of cash accruals (after repayments) are lower than the margin funding requirement for capital expenditure and enhanced working capital requirements, then despite a satisfactory projected DSCR, the entity may find itself stretched on liquidity. In such a situation, the financial flexibility of the entity to fund its growth requirements is seen as an important factor.

Foreign currency-related risks

For companies in the cement industry, while the revenues and costs are mostly denominated in Indian rupee, however, they can still have risks arising because of foreign currency movements where there is forex borrowing and also where the entities depend on imported coal / pet coke. The entities with high dependence on a single source of fuel (especially the imported) may see volatility in costs not only because of volatility in international coal prices but also because of currency vis-a-vis other players having access to diversified fuel sources. Additionally, the plant and machinery of the project could be funded through foreign currency loans. An unhedged foreign currency liability in the absence of corresponding foreign currency revenues may expose companies to foreign currency risk. The focus here is on assessing the hedging policy of the entity concerned in the context of the tenure and nature of its contracts with clients (short term/long term, fixed price/variable price) to mitigate such risk for the net exposure.

Accounting quality

Here, the accounting policies, notes to accounts and auditors' comments that are part of the annual report are reviewed. Any deviation from the Generally Accepted Accounting Practises is noted and the financial statements of the entity are adjusted to reflect the impact of such deviations.

³ RoCE is defined as profit before interest and taxes / average capital employed for the year

Tenure mismatches, and risks relating to interest rates and refinancing

Large dependence on short-term borrowings to fund long term investments can expose an entity to significant re-financing risks, especially during periods of tight liquidity. The existence of adequate buffers of liquid assets/bank lines to meet short-term obligations is viewed positively. Similarly, the extent to which an entity would be impacted by movements in interest rates is also evaluated.

Contingent liabilities/Off-balance sheet exposures

In this case, the likelihood of devolvement of contingent liabilities/off-balance sheet exposures and the financial implications of the same are evaluated.

Management Quality and Corporate Governance

All debt ratings necessarily incorporate an assessment of the quality of the rated entity's management. An entity with experienced management and independent board of directors are considered positively. An entity should practice sound corporate governance policies to serve the interest of all stakeholders. The management risk analysis also factors in the historical track record of the entity or group in timely servicing its obligations. Any delay or default history in the repayment of principal or interest payments reduces the comfort level for the rated entity's future debt servicing capability and willingness. Nevertheless, ICRA appropriately analyses the reason behind past defaults, which could also be due to adverse demand situations in the underlying industry.

In addition, the rated entity's likely cash outflows arising from the possible need to support other group entities are of importance, in case the rated entity is among the stronger entities within the group. Usually, a detailed discussion is held with the management of the rated entity to understand its business objectives, plans and strategies, and views on past performance, besides the outlook on the rated entity's industry.

Some of the other points assessed are:

- Commitment of the promoter/management to the cement business
- Attitude of the promoter/management to risk taking and containment
- The issuer's policies on leveraging, interest risks and currency risks
- The issuer's plans on new projects, acquisitions, expansion, etc.
- The ability and willingness of the group to support the issuer through measures such as capital infusion, if required
- Entity's policy regarding extending support to other group entities, if required

Parentage

Apart from standalone credit considerations, the likelihood of extraordinary support coming in from the parent to an entity or the support that an entity is likely to extend to the other group companies is factored while assessing the credit profile of the entity. This process involves an assessment of the ability and willingness of the parent to extend support to the entity (and vice-versa), in addition to evaluating the entity's own fundamental credit strength.

Summing up

ICRA's credit ratings are a symbolic representation of its opinion on the relative credit risk associated with the instrument being rated. This opinion is arrived at following a detailed evaluation of the entity's business and financial risks, its competitive strengths, its likely cash flows over the life of the instrument being rated and the adequacy of such cash flows vis-à-vis its debt-servicing obligations and other funding requirements. The credit profile of the cement companies involves an assessment of the geographical diversity, raw material security, cost competitiveness, product diversity, management strategies for managing cyclical downturns and an overall approach towards investment and growth. The operational strengths are typically reflected in financial performance; however, the financial risk profile for the entity is also governed by its future growth plans, the capital structure and the ability to fund the same.

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