SYNOPSIS: INDIAN CEMENT INDUSTRY – A PERSPECTIVE

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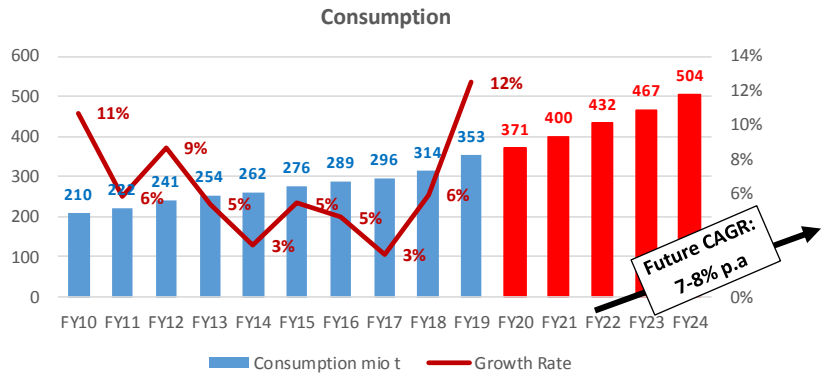
1. Introduction

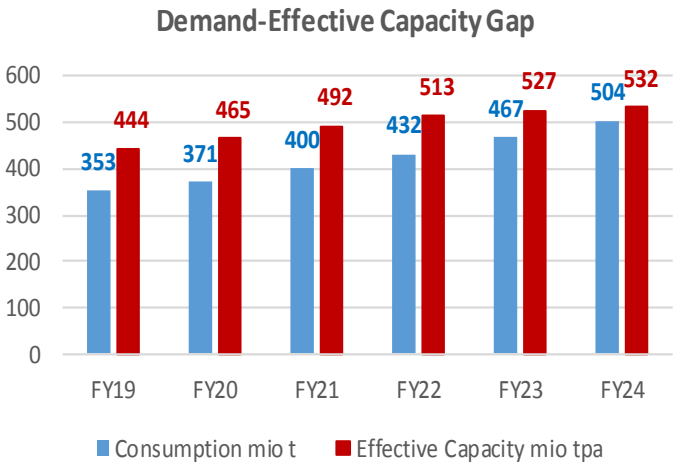
This article intends to provide an objective perspective into the Indian Cement Industry and delves into the associated fallacies and entails exploring the truth/ facts behind these myths.

2. The Indian Cement Industry

Indian Cement Industry is second largest in the world. Indian cement industry is on a path of recovery, after growing at a lower growth rate of 6% p.a. in the past 5-6 years, the cement demand is expected to grow between 7-8% p.a. in future. Demand is envisaged to reach around 500 mio t in FY 24 from around 350 miot in FY 19.



The Effective Cement Capacity (assuming cement plants on an all India basis can operate at maximum 90% capacity utilization, and considering operational capacitiy of the plants that came up during the year) was about 445 mio tpa in FY19. This is projected to exceed 530 mio tpa in FY24, indicating that new capacities will need to be commissioned by FY24 to meet the demand of FY24 and beyond. India currently has 270 operating cement plants, consisting of 160 integrated units and 110 grinding/ blending units/ terminals owned by over 80 cement players.



In Indian Cement Industry, about 25% players own around 75% cement capacity. The two national players viz. UltraTech and Lafarge Holcim hold around 30% of cement capacity share, 17 regional players like Shree Cement, Dalmia Cement, India Cements, Chettinad Cement, Birla Corp, Ramco Cements, Century, etc. own 45% of cement capacity share, and the balance 25% share is held by over 60 players.

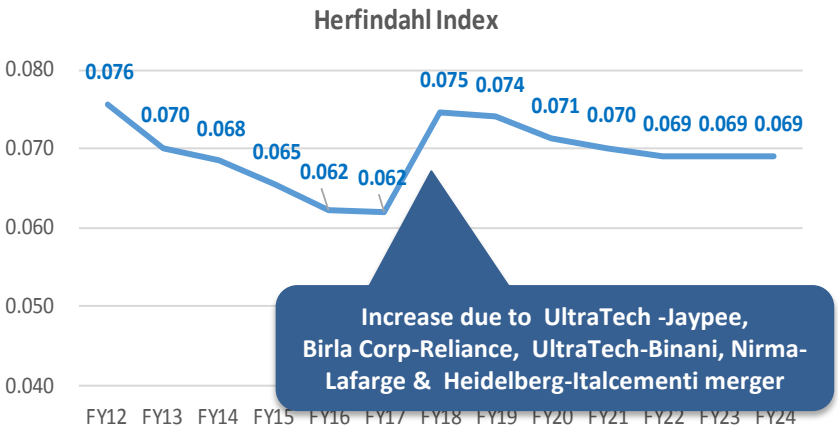
There are some popular fallacies in Indian Cement Industry; the subsequent section of this article examines these and attempts to find the truth behind them.

3. Major Fallacies

Fallacy 1: The Cement Industry is Moving Towards Consolidation

With recent major mergers and acquisitions in the cement industry, there is a perception that the industry is moving towards consolidation and a few major players are in a position to influence market policies.

Herfindahl Index can be used to examine the validity of this perception. Herfindahl Index is commonly accepted measure of market concentration, its values range from 0 to 1, where 1 indicates a monopolistic market.



Applying Herfindahl Index to the Indian Cement Industry reveals an increase in index value during FY18 & FY19, due to four major acquisitions and one Joint Venture, indicating movement towards consolidation. However, this is seen to be a temporary phase, and future analysis indicates a fall in Herfindahl Index to FY13/ FY14 levels.

Thus, India is likely to continue to be a fragmented cement market with no particular cement company/ small group of cement companies being in a dominating position to influence market policies.

Fallacy 2: Plants Need to Work At 75 - 80 % Capacity Utilization To Cash Break-Even

There is perception in the industry that with increasing input costs and decreasing margins, plants need to work at higher capacity utilization of around 75-80% in order to operational cash break even. To address this, cash breakeven was examined for a typical 6,000 tpd integrated cement plant which is designed to predominantly produce blended cement and is still servicing its debt. Our calculation indicate that the plant reaches operational cash breakeven at 50-55% capacity utilization and project breakeven at 70-75% capacity utilization.

Thus, plants can work at nearly half its capacity and still be able to meet its operational cash flow requirements. This also implies that new entrants, who may take a few years to establish their market position can, in all likelihood, be able to operationally sustain themselves during their initial years of operation.

Fallacy 3: Indian Plants Have Competitive Advantage to Export To Deficit Countries

India is a cement surplus country and it is often believed that coast-based plants are well positioned to export to deficit countries. To understand the competitive advantage of Indian cement plants, potential major export markets were first examined. India can export to the following regions in the world:

- Gulf Countries
- African countries on East Coast
- Far East Asian Countries

Most of the Gulf countries are surplus and are net exporters of clinker and cement. Far East Asian countries like Indonesia, Vietnam, Philippines, Thailand, Japan, etc. are also surplus. If we move further south-east, Australia is clinker deficit, but a cement surplus country, and more capacities are not envisaged to be set up in Australia due to strict environmental norms and regulations. Also, Far East Asian countries are better placed to export clinker and cement to Australia than India. Thus, preliminary analysis indicates that the countries on the East Coast of Africa could be possible export markets for coast-based plants in India.

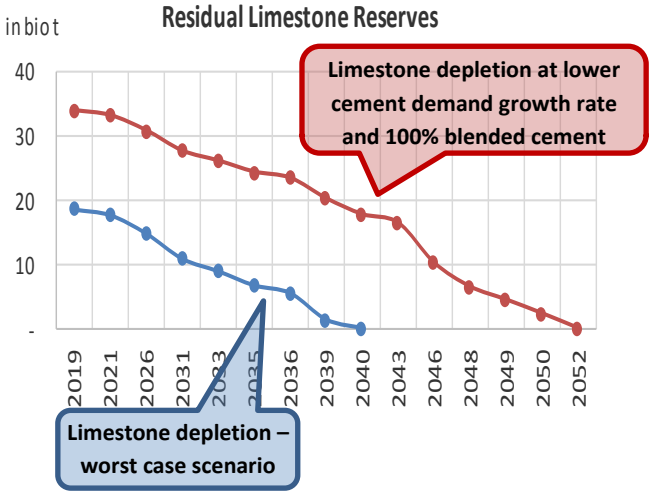
Next, competitiveness of Indian Cement plants in African East Coast was evaluated by comparing landed cost of clinker/ cement from cement plants located in India (for e.g., Gujarat) vis-à-vis potential exports from other countries. Countries on Africa's East Coast typically receive clinker/ cement from Gulf countries, Pakistan and China. Recently, inter-country movement of cement within Africa has also gained momentum. The landed cost of clinker at African East Coast from the Gulf region is reported to be in the range of USD 40-50/ t, whereas from India the landed cost is estimated as USD 55-65/ t. The difference is attributed to both freight and cost of production, which are in favour of cement plants based in the Gulf region. Similar difference is also seen in the landed cost of cement. Furthermore, countries in East Africa are also moving towards surplus situation by either setting up integrated plants and/or grinding plants.

Therefore, looking at the export competitiveness of Indian clinker/ cement to deficit markets in the East Coast of Africa, long-term exports is not seen as a viable business option.

Fallacy 4: Limestone Availability is Abundant

The cement industry in the past has taken continued availability of limestone as granted. However, like any other mineral, limestone also has a limited availability and its pace of depletion is dependent upon its utilization pattern.

The total limestone reserves which have individual tonnages greater than 50 mio t and CaO values exceeding 42% is estimated at 42 bio t. Of this, around 4 bio t fall in forest land and about 19 bio t in areas that are otherwise statutorily blocked. This leaves approximately 19 bio t of exploitable cement grade limestone. Given the expected industry growth rate and its current utilization pattern of limestone, this reserve is likely to be fully consumed by 2040.



Even if it is to be assumed that around 15 bio t out of 19 bio t reserves, which are statutorily blocked as of now, are released for exploration; and further assume that cement demand growth slows down to around 6 % pa and only 100 % blended cement is produced - the total limestone reserve is likely to be depleted by 2052.

Fallacy 5: Imported Clinker Based Grinding Units are a Viable Long-Term Business Model in Coming Years

Many countries in the Gulf are witnessing a surplus situation and securing limestone lease in India is progressively becoming challenging. These factors have led the Indian cement industry to contemplate the option of setting up grinding units based on imported clinker as a long-term business model.

In order to analyze this, Holtec evaluated the viability of a setting up a grinding unit located in the west coast of India based on imported clinker from the Gulf region. The landed cost of clinker at port based GU is estimated as around USD 50-55/ t (~INR 3,700/ t) and net realization on cement sales was assumed to be about INR 4,000/ t. The EBITDA for the project works out be INR 400-500/ t for blended cement and Internal Rate of Return as 12-13%.

The project EBITDA may become negative if sea freight increases, which are dependent upon global dynamics; also, the Indian government may impose higher duties on clinker import to protect the surplus indigenous cement industry. Any adverse change in the scenario would make it difficult for the cement project to generate adequate cash flow to repay its loan and interest, thus making the project unviable.
However, a cement company may consider setting up a grinding unit, in the short-term, based on imported clinker for early cement entry into the market while it secures a limestone deposit and sets up its clinker plant within India.

4. CONCLUSION

The Indian Cement Industry is currently working at an effective capacity utilization of almost 80% and with increase in demand the effective capacity utilization is forecast to reach 90% over next 5-6 years. However, plants located in Maharashtra and South India have a lower effective capacity utilization of ~70% compared to average 85% capacity utilization in rest of India. Exports are not likely to be the focal point of the industry and the cement players will continue to target the domestic market as part of its revenue model.

Limestone availability is limited and securing limestone is getting more arduous with the introduction of auctioning process. Thus, cement players are likely to block limestone deposits for maintaining their strategic presence in the market and for catering to their expansion plans.

Cement players who plan to introduce early cement in the market may set up grinding units based on imported clinker in short term, while at the same time secure limestone deposit and set up their own clinker unit.

India is a fragmented market and is envisaged to remain so in future. Barriers to new entrants are seemingly high due to limestone being now available only through the auction process. However, once a plant is setup, the new entrants can work at 50-55% capacity utilization to achieve operational cash break even in their initial years and sustain themselves.

Cement demand is envisaged to overtake effective capacity in next 6-7 years, and typically a greenfield plant commissioning can take 4-5 years after grant of Mining Lease; in context to which it can deduced that work may commence on some greenfield projects within the next year or so. However, in the short-medium term, brownfield capacity expansions will dominate new capacity additions.