

RESEARCH ARTICLE

## Growth and Profitability of Selected Cement Industries in India

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### Abstract

The present study assessed growth and profitability of selected cement industries in India using secondary data. The secondary data of cement industries was collected for 10 years based on sales turnover of above 1000 crores. Statistical analysis namely gross profits, net profit, return on investment, return on equity, payout ratio and correlation analysis were used to analyze the growth and profitability of cement industries. It was clear that the selected 12 cement industries recorded a good gross profit ratio during the study period except JK Cements (15.03) and Prism Cements (17.45). The highest average rate of return on capital employed was 33.89% in Shree Cements, followed by 33.31 and 33.22% in Ambuja Cements and ACC Cements. The present study may also be useful to creditors and the financial institutions which may act as a guide to investors in taking decisions.

**Keywords:** Cement industry, secondary data, sales turn over, growth, profitability, investors.

### Introduction

The cement marketplace in India is estimated to develop at a compound annual growth rate of 8.96% throughout the year 2014 to 2019. In India, 67% of the overall consumption of cement for the housing sector is the major demand for cement. The additional main consumers of cement contain infrastructure at 13%, commercial construction at 11% and industrial construction at 9%. To meet the increase in demand, cement corporations are estimated to enlarge 56 million tons capability over the following 3 years. The cement capability in India may record a growing of 8% by subsequent year end to 395 MT from the present-day near of 366 MT. It might raise more to 421 MT by end of the year 2017. The per capita consumption of the country positions at nearby 190 kg. An overall of 188 large cement plants organized for 97% of the entire capacity installed in the country, although 365 small plants were break. Of these, 77 large cement plants are situated in the states of AP, Rajasthan and TN. In India cement industry is controlled by a few firms. The 70% of the entire cement production of the country comes under the top 20 cement companies. India has a lot of potential for improvement in the infrastructure and construction sector and the cement sector is estimated to largely benefit from it. Some of the latest major government initiatives such as development of 100 smart cities road, buildings, ports, airports and other civil constructions are expected to provide a major boost to the sector. Expecting such growths in the country and anticipating more favorable government foreign policies, several foreign companies such as Lafarge, Holcim and Vicat had invested in the country in the recent past.

Vijayakumar (1998) had used regression analysis and identified that profitability has reflected a considerable part of the growth of the firms in Indian public sector. Profitability for the earlier period or satisfied profitability for the upcoming period, determining profitability is the essential portion for the achievement of the industry (Brindadevi, 2013). So, keeping the above facts in view, the following problems were addressed in this study.

1. How far the companies have been efficient in terms of profitability, liquidity and overall performance?
2. What are the problems which hinder the growth and profitability of the industry?
3. Whether the cement companies are inherently strong enough to face financial crises?
4. What are the internal and external economies that will be supportive for the growth of the companies?
5. What will be the future prospects for the industries in the light of the performance of selected companies?

The present study was designed with the following objectives:

1. To analyze the growth prospects of selected cement industries.
2. To evaluate the growth and profitability of the cement industry in terms of capacity generation, utilization of capacity generated, factor productivity, profitability and cost-effectiveness.
3. To compute ratios and their effectiveness to find out the growth and profitability.
4. To evaluate and extrapolate the profitability and sales for future period.
5. To recommend ways and means to achieve overall growth pivoting the current situation.

## Materials and methods

**Company profile:** This study uses the data collected from 10 cement industries based on sales turnover above 1000 Core.

**Ultra Tech Cement (UCC):** In the year 2000, Ultra Tech cement was incorporated by Larsen and Toubro. It was developed by Grasim and changed name as Ultra Tech Cement in the year 2004. Ultra Tech cement is a share of Aditya Birla group; it is the country's biggest exporter of cement ashes. Ultra Tech cement Ltd. has a yearly capability of 52 million tons. Ordinary portland cement, portland pozzalana and portland blast furnace slag cement are produced and marketed. It also produces ready mix concrete (RMC). All plants have received ISO 9001 certification.

**ACC Limited:** India's leading producer of cement and concrete is ACC Ltd. ACC is involved in the production of cement and ready-mixed concrete. They are manufacturing a variety of Portland cement for common construction and different tenders. In addition, they also offer two products namely, bulk cement and ready mix concrete. The company's actions are extent throughout the country and have 16 modern cement factories.

**Ambuja Cements (AMC):** Ambuja cements was incorporated in the year 1986. The company's entire cement volume is 18.5 million tones. Their plants are particular of the most effective in the world. With environment protection actions that are on equality with the luxury in the world. Ambuja monitors an exclusive homemade attitude of giving people the expert to set their own objectives and the liberty to attain their objectives. This simple vision has generated an environment where there are no restrictions to superiority, no restrictions to effectiveness. Ambuja is the maximum profitable cement corporation in India, and one of the lowermost cost producers of cement in the world.

**Shree Cement Limited (SCL):** It is one of largest and premier cement makers in North India. Under their portfolio, they have three brands, which are Shree Ultra Jung Rodhak Cement, Bangur Cement and Rockstrong Cement. Their industrial units are situated at Rajasthan in Beawar, and Ras. They are correspondingly having the crushing units in Khushkhera in Rajasthan.

**Prism Cement Limited (PCL):** Rajan Raheja Group promoted by the Prism Cement Limited (PCL) is an ISO 9001:2000 certified industry. Prism cement was amalgamated on March 26<sup>th</sup> 1992 in the name of Karan Cement Limited. The company markets Portland Pozzollana Cement (PPC) and the full collection of Ordinary Portland Cement (OPC) Grades of 33, 43 and 53. It functions as solitary furnace cement plant at Satna, MP, furnished with state-of-the-art technology and mechanical provision from F.L Smidth and Co., Denmark, world privileged cement expertise.

**India Cements (IC):** India Cements is a cement producing company, was started in the year 1946. It has started seven plants through Andhra Pradesh and Tamil Nadu. In south India it is the biggest producer of cement. The company is the leader in south India and it holds 28 percent of the market share. The cement producer targets 35 percent market share. It has 10,000 stockiest for distribution system. The company has ability to manufacture 9 million tonnes (MT) cement per annum.

**Ramco Cements (RC):** In the year 1950, venture in cement industry was not good-looking due to price controls. Some industrialists came forward to invest in cement industry for its development. Shri Manubai Shah, central minister for industries in late 50s came to madras to see the industrialists Shri PAC Ramasamy Raja and insisted him to assist a cement factory in Tamil Nadu. It was willingly accepted by Shri PAC Ramasamy Raja and Madras Cements Ltd. was changed as Ramco Cements Ltd. in the year 1961.

**Birla Cements (BC):** Birla Corporation is a flagship company of MP Birla group. It was built in 1919 by Madhav Prasadji Birla. The company crossed Rs. 1300 core revenue mark and the name was changed to Birla Corporation in 1998. The MP Birla group has 500 industry segments like textiles, man-made fibres, cables, woolens, automobiles, textiles and industrial machines, paper, shipping, cement, sugar, jute, aluminium, copper, chemicals, power plants, fertilizers, etc. It has eight industrialized facilities located in Pune, Rajasthan, Gurgoan, Uttar Pradesh, West Bengal and Madhya Pradesh.

**JK Cements (JKC):** The Company was integrated under the companies act as JK Cement Ltd. on November 24, 1994 and received its certificate of commencement of business on the same date. One of the main objectives of the company in Memorandum of Association is the attainment of the whole or substantially the whole of the undertakings and properties consisting of the JKSL cement division.

**JK Lakshmi Cements (JKCL):** JK Lakshmi cement, an ISO 9002 certified company, begun its process in the year 1938 in Sirohi district located in Rajasthan. It manufactures large range of cement. The group has an income of Rs. 1500 crore. The company has an association of 70 cement dumps and over 2200 dealers extend across the states of Uttar Pradesh, Delhi, Mumbai, Rajasthan, Punjab, Haryana, Gujarat, Jammu and Kashmir and Pune. The shared capacity of the company today is at 4.75 million tonnes per annum.

**Data collection:** This study is mainly based on the secondary data. They were collected from company balance sheet, profit and loss account, published journals, magazines and newspapers.

Table 1. Profitability analysis of the selected cement companies.

Company	UCL	ACC	ACL	SCL	PCL	ICL	RCL	JCL	BCL	JKCL
GPR	22.19	24.81	30.90	31.19	17.45	21.01	27.14	15.03	22.56	20.16
NPR	11.98	15.36	18.98	12.03	9.24	7.68	7.94	7.62	14.57	11.08
ROI	27.34	33.22	33.31	33.89	29.43	16.58	31.24	20.04	27.87	18.11
ROE	6.44	5.88	3.95	1.25	24.22	85.68	2.74	2.04	3.60	2.25
POR	0.06	0.38	0.41	0.08	0.15	1.70	7.44	0.12	15.93	0.13

Source: Calculated from company's annual report.

**Research tools:** To analyze the growth and profitability of cement industry in India, the following tools have been applied using Karl Pearson correlation analysis.

**Ratio analysis:** It helps in estimating financial soundness or weakness of the selected cement companies through the following facts namely liquidity, activity, solvency, profitability and these ratios are used to compute financial performance of cement companies (Sasikala and Balakrishnan, 2015).

**Profitability analysis:** It is the indication of the efficiency with which the operations of the business are carried on. Poor operational performance may indicate poor sales and hence poor profits (Maheswari, 2004).

**Gross profit ratio (GPR):** This ratio expresses relationship between gross profit and net sales. Its formula is gross profit/net sales (Sasikala and Balakrishnan, 2015).

**Net profit ratio (NPR):** This ratio indicates net margin earned on a sale. Net profit is arrived at by deducting operating expenses from gross profit. The ratio may be stated as: Net operating profit/net sales.

**Return on investment (ROI):** It is also called as return on investment (ROI) or return on capital employed (ROCE). It is calculated as: Operating profit/capital employed.

**Return on equity (ROE):** It is a variant of debt equity ratio. It finds relationship between the proprietor's funds and total tangible assets. It is expressed as: Shareholders' funds/total tangible assets.

**Payout ratio (POR):** This ratio indicates what proportion of earning per share has been used for paying dividend. The ratio can be calculated as: Dividend per equity share/earning per equity share.

**Total sales relationship with its parameters:** To assess the Karl Pearson coefficient of correlation of independent variable with total sales, correlation has been applied taking total sales as a dependent variable and Cost of production (COP), Interest (INT), Depreciation (DEP), Tax, Net profit (NP) as independent variables accordingly the following null hypothesis has been framed.

H<sub>0</sub>: "There is no significant correlation between the independent variable and total sales".

**Limitations of the study:** This study is carried out on secondary data and limited to 10 years from 2005 to 2014 for the analysis and conclusions. A few of the companies had to be compulsorily excluded from analysis because of non-availability of data either due to non-submission of statements or due to their closure/merger/suspension of operation during the study period. There are many financial performance measurements using ratio analysis and it might be difficult to use all the measures. This study uses selected few ratios only, so different performance levels will give different results.

### Results and discussion

It is clear from the study that the gross profit ratio of the selected 10 cement industries had a good gross profit ratio during the study period except JK cements (15.03) and Prism Cements (17.45). The mean value is higher in Shree cements (31.19) and Ambuja cements (30.90) respectively. The mean value is very low and Kurtosis is negative in JK Cements and India Cements. The net earnings performance is efficient in Ambuja cements (18.98) and ACC (15.36) respectively. The highest average rate of return on capital employed was 33.89% in Shree cements (33.31) and Ambuja cements (33.22%). Investors want to see a high return on equity ratio because it indicates that the company is using its investors' funds effectively. Average return is high in India Cements followed by Prism Cements and all other companies had low return. Payout ratio, a high dividend means that the company is reinvesting fewer earnings in future periods; low payout ratio today may result in higher capital gains in future. Among the selected 10 companies, Birla Cements had high value followed by Ramco Cements. Other companies had very low average value (Table 1).

The Karl-Pearson correlation values showed that cost of production had a high positive degree of relationship with total sales for all the companies. Interest has a high positive correlation with the total sales, except ACC and AMC. AMC shows a negative correlation with the total sales. Depreciation has a high positive correlation with total sales. Tax reveals a poor correlation with total sales for all the companies except UTC and JKL; it was negatively correlated with total sales for PRC, BRC and CHC. The correlation between net profit and total sales is negative for PRC and INC and is of very low degree for ACC, RAC, JKC, BRC, JKL, CHC and OCL. Thus, the null hypothesis is rejected (Table 2).

Table 2. Karl-Pearson coefficient correlation of total sales of the selected cement companies.

S. No.	Company	Variable	Correlation
1	UCL	COP	.999**
		INT	.884**
		DEP	.989**
		TAX	.671*
		NP	.958**
2	ACC	COP	.979**
		INT	.155
		DEP	.981**
		TAX	.250
		NP	.545
3	ACL	COP	.986**
		INT	-.506
		DEP	.929**
		TAX	.451
		NP	.663*
4	SCL	COP	.990**
		INT	.895**
		DEP	.718*
		TAX	.328
		NP	.879**
5	PCL	COP	.998**
		INT	.955**
		DEP	.995**
		TAX	-.317
		NP	-.583
6	ICL	COP	.972**
		INT	.672*
		DEP	.956**
		TAX	.322
		NP	-.002
7	RCL	COP	.985**
		INT	.945**
		DEP	.949**
		TAX	.358
		NP	.522
8	JCL	COP	.970**
		INT	.908**
		DEP	.949**
		TAX	.388
		NP	.502
9	BCL	COP	.956**
		INT	.915**
		DEP	.948**
		TAX	-.097
		NP	.139
10	JKCL	COP	.974**
		INT	.949**
		DEP	.874**
		TAX	.694*
		NP	.298

\*\* - Significance at 1% level; \* - Significance at 5% level. COP: Cost of production, INT: Interest, DEP: Depreciation, NP: Net profit.

From this study, it may be noted that the selected cement companies wanted to reduce their expenses like cost of production through purchase of raw materials, power etc. and depreciation cost of all the companies were high, some of the cement companies have high rate of tax, some of the companies have pay high cost of interest and these are the main reason for low net profit.

### Conclusion

Study accompanied on growth and profitability of cement companies provides an opinion for valuation of problems in profitability analysis and growth of the cement companies based on their profit, balance sheet and loss a/c. The tools used in the study have given useful and productive suggestions. The ratio analysis of the company is suitable, the companies should enrich its performance for exploiting chances in future and meeting challenges helps the management to take financial decisions. The movement and growth of the Ultra Tech, ACC, Ambuja, Shree and Prism companies are favorable in future period.

This study has theoretical and practical significance and will help the academicians and researchers to develop new ideas for future study. The study focuses on the problems and prospects of cement industry, which may interest not only those who are interested in manufacturing cement or related products but also others to see the process of change within the industry. This study will be useful to the management to take investment decisions and anticipate future conditions, identification of its areas of strength and weakness and to take appropriate decisions for the maximization of its intrinsic value. The study may also be useful to creditors and the financial institutions in their effective credit policy formulation. The study will act as a guide to investors in their investment decisions.

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