

# CEMENT COMPANIES FINANCIAL ANALYSIS IN INDIA

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**Abstract:** This paper is intended to analyze the financial performances of the selected cement companies in India. It aims at analyzing the individual performance of the selected cement companies are to be calculated and also to analyze the company's financial position. The financial data related to the selected cement companies were collected from website and annual reports of the selected cement companies, referred various journals and visited libraries. This paper is to cover the profile of the study units. The selected three cement companies Shree Cement Limited, Birla Corporation Limited and JK Lakshmi Cement Limited.

**Keywords:** Ready Mixed Concrete (RMC), Ordinary Portland Cement (OPC)

## Shree Cements Ltd

Shree Cement Ltd is one of India's premier cement makers and the largest in North India. The company is an energy conscious and environment friendly business organization. They have three brands under their portfolio, namely Shree Ultra Jung Rodhak Cement, Bangur Cement and Rockstrong Cement. Their manufacturing units are located at Beawar, and Ras in Rajasthan. They are also having the grinding units in Khushkhera in Rajasthan. The company is headquartered in Kolkata, India. Shree Cement Ltd was incorporated in the year 1979. The company was promoted by Calcutta-based industrialists P D Bangur and B G Bangur. During the year 1994-1995, the company undertook new activities in the field of leasing and hire purchase. The company made a tie up with Christian Pfeiffer and Company, Germany, for installing a horizontal impact crusher to pre-crush clinker before using it in the cement mill for upgrading cement output and save energy. Also, they made a tie up with IKN, Germany, for incorporating their KIDS system in the clinker cooler. During the year 2001-2002 the company exercised to commission a captive 36 MW thermal power project at a cost of Rs. 120 crores. In September 2001, they signed an EPC contract with Thermax Ltd and commenced the civil work in October 2001.

During the year 2006-2007, the company expanded their production capacity at Bangur city from 1.50 MTPA to 3.00 MTPA by commissioning their unit-IV on March 26, 2007. Also, the company commissioned one unit of captive power plant of 18 MW capacities at Bangur city in order to meet the power requirement of the expanded capacity. The company is in the process of the expanding the capacity in their Clinker Grinding Unit at Suratgarh in Rajasthan and Roorkee in Uttrakhand. The works on these projects is running as per schedule and are expected to be commissioned during the financial year 2009-2010. Also, the company is in the process of setting up 100 MW capacity (50MWx2) power plants at Bangur city. The first 50 MW power plants is expected to be commissioned by fourth quarter of the financial year 2009-2010 while second 50 MW power plant is expected to be commissioned by first half of 2010-2011. The company is in the process of setting up the 43 MW Green Power Projects (Waste Heat Recovery Projects) at Bangur Nagar, Beawar and Bangur city, Ras. The projects are expected to be completed by fourth quarter of financial year 2009-2010. The company is planning to consolidate their presence in the high growth market with additional power generation capacity.

## Birla Corporation Ltd

Birla Corporation Limited (BCL) is the flagship Company of the M.P. Birla Group. Birla Jute Manufacturing Company Limited incorporated as in the year 1919. The company has products ranging from cement to jute goods, PVC floor covering, as well as auto trims. The Cement Division of Birla Corporation Limited has seven plants, having an installed capacity of 5.8 million tons. These plants manufacture varieties of cement, including Ordinary Portland Cement (OPC), 43 and 53 grades, fly ash-based Portland Pozzolana Cement (PPC), Portland Slag Cement (PSC) and low- alkali Portland cement. Recently, the Company has started producing Sulphate Resistant Cement (SRC) and it has been well accepted in the market. The Jute Division of the company manufacturing more than 120 tonnes of a variety of jute products in Birla Jute Mill. During the year 1969, BCL had entered into an agreement with Hindustan Steel Ltd for the purchase of blast furnace slag from the Durgapur Steel Plant to set up a slag-cement plant at Durgapur. Bally Jute Co. Limited's two units, such as Bally-1 and Bally-2 were amalgamated with the Company with effect from 1st April of the year 1982. With effect from 7<sup>th</sup> February of the year 1983, the name of the company was changed from the Birla Jute Manufacturing Company Limited to Birla Jute & Industries Limited. The captive thermal plant of 4.5 MW at Chittorgarh was commissioned in December of the year 1985. As a part of modernization programme, modern jute spreaders were introduced in both Birla and Bally Mills during the period of 1988.

During the year 1991, Birla Vinoleum's new PVC floor covering plant was fully installed. The Company undertook to manufacture Cetariaferro alloys in one of the furnaces of Birla Carbide. India Linoleums Ltd., a subsidiary of the Company was amalgamated with the company effective 1st April of the year 1991. The closure of the Company's Bally Jute Mills from 26<sup>th</sup> August of the year 1992, had also contributed to the low turnover and profits. The Company entered into a long-term agreement with a German

linoleum manufacture for technical help in upgrading the products. During the year 1996, a joint venture company Birla Redland Ready mix Ltd.' was incorporated with Redland PLC, UK to set up facilities for manufacture of ready mix cement concrete in India. During the year 2001-2002, the company had modernized/upgraded the plant at Cittor Cement Works at Chittorgarh. During the year 2002-2003, the company had developed new product lines, Desktop and Bulletin Board. In 2003-2004, the Satna unit of the company was awarded the first prize for Noise, Vibration & Aesthetic Beauty and also the first prize for maximum percentage reduction in electrical energy consumption per MT of clinker produced. During April of the year 2004 the company has decided to close its Birla Synthetics at Birlapur. The company has expanded its installed capacity of Auto Trim Parts by 36000 Pcs during the 2004-2005 and with this expansion the total installed capacity of Auto Trim Parts has increased to 603000 Pcs. The company's unit, Birla Carbide and Gases was permanently closed from 31<sup>st</sup> January of the year 2005. The company's capacity enhancement project at Durgapur viz. DurgaHitech Cement, which was commenced its commercial production during the year 2005-2006. BCL received the Amity Corporate Excellence Award during the same year 2006-2007. Credit Analysis and Research Limited (CARE) assigned 'CARE AA' rating to the company for long term borrowing programmed in the year 2006-2007.

### **JK Lakshmi Cement Ltd**

Chronicle of the company thus began in the state of Rajasthan during the year 1938. One of the established names in the cement industry, JK Lakshmi Cement (JKLC) Ltd has state-of-the-art plant at Jaykaypuram, district of Sirohi, Rajasthan having an annual capacity of 3.65 million tonnes. With the use of the latest technology from M/s Blue Circle Industries and modern equipment's from M/s Fuller International of USA, the company going from strength to strength and produce JK Lakshmi Cement, JK Lakshmi plast and JK Lakshmi Power Mix. It is also the first cement producer of Northern India to be awarded an ISO 9002 certificate and be accredited by NABL (Department of Science and Technology, Government of India) for its Lab Quality Management systems. During the year 1993-94, the company had received an ISO 9002 certificate. The Company name was changed to J.K Corp Limited from Straw Products Ltd in 24<sup>th</sup> February of the year 1995 and also in the same year entered into Multi Product Corporation Manufacturing Paper, Cement, and Magnetic Tape. In the year 1998, the company introduced a new brand Lakshmi Chattan. The Company during the year has bagged the prestigious Greentech Safety Award 2003-2004 for Safety and Environment from the Greentech Foundation and the Golden Peacock National Award for Environment Management System from the World Environment Foundation.

During the year 2004-2005, the company had exited from Magnetic Tape business and in the same year, the company changed its brand name from Lakshmi Cement into JK Lakshmi Cement. The Company during the year 2004-2005 commenced marketing of Ready Mixed Concrete (RMC) from Gurgaon based plant under the brand name JK Lakshmi Ready Mix Concrete. The Company name was changed to JK Lakshmi Cement Limited with effect from 6<sup>th</sup> October of the year 2005. The Company's Scheme of demerging its Investment Division to another company had been completed in the year 2005-06. The Scheme of Reconstruction, Arrangement and Demerger between JKLC and Ashim Investment Company Limited (AICL) had become effective from 31st March of the year 2006. JK Lakshmi Cement Limited was declared a winner of the Golden Peacock Award for Corporate Social Responsibility for the year 2007. JKCL had commissioned its Phase I Captive Thermal Power (18 MW) plant in March of the year as its significant milestone. During the same year of 2007, the company had enhanced its Kilns, further, it started cement mills No.4 and 5.

## **PROFITABILITY PERFORMANCE**

### **Operating Profit Margin Ratio**

The operating profit margin ratio indicates how much profit a company makes after paying for the variable costs of production such as wages, raw materials, etc. It is expressed as a percentage of sales and shows the efficiency of a company the controlling the costs and expenses associated with business operations. Phrased more simply, it is the return achieved from standard operations and does not include unique or one time transactions. Terms used to describe operating profit margin ratios this includes operating margin, operating income margin, operating profit margin or return on sales (ROS). The operating profit ratio is calculated as follows:

$$\text{Operating Profit Ratio} = \frac{\text{Operating profit}}{\text{sales}} \times 100$$

### **Operating Profit Margin Ratio**

S.No	Company Name	2009	2010	2011	2012	2013	Mean	S.D
1	Shree Cement Ltd	35.1	41.45	25.37	28.05	27.92	31.57	6.59
2	Birla Corporation Ltd	24.71	33.31	20.88	18.27	15.09	22.45	7.02
3	JK Lakshmi cement Ltd	25.34	29.56	13.9	19.08	20.86	21.74	5.98

The above table reveals that ratio of Shree Cement Ltd was 35.1 in 2009 and after that the ratio on a decreasing trend. In 2013 it finally reached 27.92 during the year. The mean and standard deviation are 31.57 and 6.59 respectively.

The ratio of the Birla Corporation Ltd was 24.71 and after that the ratio on a decreasing trend the below normal level. In 2013 finally it reached 15.09 during the year. The mean and standard deviation are 22.4 and 7.02 respectively.

The ratio of the JK Lakshmi Cement Ltd was 25.34times in 2009 and after that ratio on a decreasing trend. In 2013 finally it reached 20.86 during the year. The mean and standard deviation are 21.74 and 5.98 respectively.

### Test of Significance of Operating Profit Margin

Table gives the relevant details of the operating profit margin of the three cement companies which differed significantly from each other and shows whether the ratio differ across five years. The two-way ANOVA used.

#### Hypothesis

##### Set-1: $H_0$

There is no significant difference in the values of the operating profit ratio of the selected cement companies.

##### Set-2: $H_1$

There is no significant difference in the value of the operating profit ratio of the selected cement companies during the different years.

Level of significance =0. 05

**ANOVA Operating Profit Ratio**

Sources of variation	SS	DF	MS	F
With rows	1347.821	9	149.7579	10.06794
Between columns	808.7845	4	202.1961	13.59326
Residual	535.4901	36	14.87473	
Total	2692.096	49		

#### Result

##### Set-1: $H_0$

The table value of 'F' at 5% for V =4, V2=36 is 1.96. Since the calculated value is more than the table value of the table the null hypothesis is rejected. Hence, the values of operating profit ratio of the selected cement companies differ significantly from each other.

##### Set-1: $H_1$

The calculated value of 'F' is 13.59 the table value of 'F' at 5% for V1=4, V=36 is 1.96. Since the calculated value more than the value the  $H_0$  is rejected. Hence the value of operating profit ratio differs significantly during the period.

### Profit Before Interest and Tax Margin Ratio

Profit before interest and taxes or operating income is an investment formula to measure of a corporation's profitability by operating expenses from revenue excluding tax and interest. Sometimes, profit before interest and tax is also referred as operating income, operating profit or even operating earnings, normally, investors will see profit before interest and taxes in the income statement. The formula for the computation of profit before interest and tax margin is as follows:

$$\text{Profit before interest and taxes (PBIT)} = \frac{\text{Net profit} + \text{Interest} + \text{Taxes}}{\text{Sales}} \times 100$$

**Profit Before Interest and Tax Margin Ratio**

S.No	Company Name	2009	2010	2011	2012	2013	Mean	S.D
1	Shree Cement Ltd	26.93	25.3	5.92	12.81	19.47	18.08	8.77
2	Birla Corporation Ltd	21.99	29.74	17.08	14.19	10.56	18.71	7.44
3	JK Lakshmi Cement Ltd	19.24	23.64	7.38	11.12	13.25	14.92	6.49

The above table shows that ratio of Shree Cement Ltd was 26.93 in 2009 and after that the ratio on a decreasing trend. In 2013 it finally reached 19.47 during the year. The mean and standard deviation are 18.08 and 8.77 respectively.

The ratio of the Birla Corporation Ltd was 21.99 and after that the ratio on a decreasing trend the below normal level. In 2013 finally it reached 10.56 during the year. The mean and standard deviation are 18.71 and 7.44 respectively.

The ratio of the JK Lakshmi Cement Ltd was 19.24 times in 2009 and after that ratio on a decreasing trend. In 2013 finally it reached 13.25 during the year. The mean and standard deviation are 14.92 and 6.49 respectively.

### Test of Significance of Profit Before Interest and Tax Margin

Table gives the relevant details of the profit before interest and tax margin of the five cement companies which differed significantly from each other and shows whether the ratio differ across five years. The two-way ANOVA used.

#### Hypothesis

##### Set-1 : Ho

There is no significant difference in the values of the profit before interest and tax margin ratio of the selected cement companies.

##### Set-2 : Ho

There is no significant difference in the value of the profit before interest and tax ratio of the selected cement companies during the different years.

Level of significance =0.05

**ANOVA Profit Before Interest and Tax Margin Ratio**

Sources of variation	SS	DF	MS	F
With rows	673.9215	9	74.88017	4.637797
Between columns	1010.992	4	252.7479	15.65426
Residual	581.2427	36	16.14563	
Total	2266.156	49		

#### Result

##### Set-1: Ho

The table value of 'F' at 5% for V =4, V2=36 is 1.96. Since the calculated value is more than the table value of the table the null hypothesis is rejected. Hence, the values of profit before interest and tax ratio of the selected cement companies differ significantly from each other.

##### Set-1: Ho

The calculated value of 'F' is 15.65 the table value of 'F' at 5% for V1=4, V=36 is 1.96. Since the calculated value more than the value the Ho is rejected. Hence the value of profit before interest and tax ratio differs significantly during the period

### Gross Profit Margin Ratio

The gross profit margin ratio, also known as gross margin, is the ratio of gross margin expressed as a percentage of sales. Gross margin, alone, indicates how much profit a company makes after paying off its Cost of Goods sold. It is a measure of the efficiency of a company using its raw materials and labour during the production process. The value of gross profit margin varies from company and industry. The higher the profit margin, the more efficient a company is. Gross profit margin can be assigned to single products or an entire company. The ratio is calculated as follows:

$$\text{Gross profit} = \frac{\text{Gross profit}}{\text{Sales}} \times 100$$

**Gross Profit Margin Ratio**

S.No	Company Name	2009	2010	2011	2012	2013	Mean	S.D
1	Shree Cement Ltd	27.54	25.73	6.06	13.17	20.12	18.52	8.94
2	Birla Corporation Ltd	22.3	30.74	17.86	14.78	11.08	19.35	7.58
3	JK Lakshmi Cement Ltd	19.71	24.19	7.48	11.53	13.61	15.30	6.64

The ratio of Shree Cement Ltd was 27.54 in 2009 and after that the ratio on a decreasing trend. In 2013 it finally reached 20.12 during the year. The mean and standard deviation are 18.52 and 8.94 respectively.

The ratio of the Birla Corporation Ltd was 22.3 and after that the ratio on a decreasing trend below normal level. In 2013 finally it reached 11.08 during the year. The mean and standard deviation are 19.35 and 7.58 respectively.

The ratio of the JK Lakshmi Cement Ltd was 19.71 times in 2009 and after that ratio on a decreasing trend. In 2013 finally it reached 13.61 during the year. The mean and standard deviation are 15.30 and 6.64 respectively.

### Test of Significance of Gross Profit Margin Ratio

Table gives the relevant details of the gross profit margin of the three cement companies which differed significantly from each other and shows whether the ratio differ across five years. The two-way ANOVA used.

#### Hypothesis

##### Set-1 : Ho

There is no significant difference in the values of the gross profit ratio of the selected cement companies.

##### Set-2 : Ho

There is no significant difference in the value of the gross profit ratio of the selected cement companies during the different years.

Level of significance =0.05

**Gross Profit Margin Ratio**

Sources of variation	SS	DF	MS	F
With rows	764.862	9	84.98467	5.007039
Between columns	1050.572	4	262.643	15.47413
Residual	611.0294	36	16.97304	
Total	2426.464	49		

#### Result

##### Set-1: Ho

The table value of 'F' at 5% for V =4, V2=36 is 1.96. Since the calculated value is more than the table value of the table the null hypothesis is rejected. Hence, the values of gross profit ratio of the selected cement companies differ significantly from each other.

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**CONCLUSION**

The analysis is helpful for any shareholder, investor, creditor banker or any other interested party who is more with the financial position of the company. The result of the study indicates that Shree Cement Ltd, Birla Corporation Ltd and JK Lakshmi Cement Ltd were also performing well during the study period while J K Lakshmi Cement Ltd found performing comparatively normal during the study period. The cement companies should modify their performance and adopt the same to improve their ratio analysis.

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