

# A STUDY ON FINANCIAL PERFORMANCE OF CEMENT INDUSTRIES IN INDIA

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## ***Abstract***

*India is the second largest cement producer in the world and accounts for 6.7 per cent of world's cement output. The main purpose of this study is to study the financial performance of cement industries in India. This study is based on secondary data. Secondary Data is collected from annual reports, books, journals and periodicals. The data collected for the study has been analysed using multiple regression analysis. The study concludes that the value of R is highly predictable for the companies like AMBUJA CEMENT and RAMCO CEMENT from 2014-2015 to 2017-2018.*

*Keywords: Cement, Industries, Financial, World, Performance, Capacity, Position, Growth, Etc.,*

## **INTRODUCTION**

Finance is the study of fund management, or the allocation of assets and liabilities over time under conditions of certainty and uncertainty. It is the systematic process of operating, deploying, maintaining, disposing and upgrading assets in the most cost-efficient and profit-yielding way possible. The term "finance management" covers investment management or financial management in the financial sector that manages investment funds for client accounts. The system of managing funds includes a fund collecting unit configured to collect a first type fund and a second type fund depending on a preset reference rate. A fund managing unit configured to manage at least one of summed funds which are acquired by incorporating funds collected through the first type fund into funds collected through the second type fund and summing these funds, and establish a capital protection amount in the second type fund to separately manage the funds collected through the first type fund from the managed summed fund when a loss of the capital protection amount or more occurs; and a return sharing unit configured to share a return generated depending on a fund management with the first type fund and the second type fund, respectively, depending on a preset

return sharing ratio. Financial management is the specific area of finance dealing with the financial decision corporations make, and the tools and analysis used to make the decisions. The discipline as a whole may be divided between long term and short term decisions and technique. Both share the same goal of enhancing firm value by ensuring that return on capital exceeds cost of capital, without taking excessive financial risk.

India is the second largest cement producer in the world and accounts for 6.7 per cent of worlds cement output. The cement production capacity is estimated to touch 550 MT by FY 20. A total of 188 large cement plants together account for 97 per cent of the total installed capacity in the country, while 365 small plants make up the rest. Of the total 188 large cement plants in India, 77 are located in the states of Andhra Pradesh, Rajasthan and Tamil Nadu. It plans to increase investment in infrastructure to US\$ 1 trillion in the 12th Five Year Plan (2012–17).

#### **OBJECTIVES:**

- To study and analyze the financial performance of the cement industries in India.
- To understand the overall financial position of the cement industries in India.

#### **SCOPE OF THE STUDY**

- This study clearly explains the financial position of the cement industries during the study period.
- The study report about the financial position of ULTRA CEMENT, AMBUJA CEMENT, SHREE CEMENT, RAMCO CEMENT, BIRLA CORP, OCL INDIA from 2014 to 2018.

#### **LIMITATIONS OF THE STUDY:**

- ◆ This study is confined to the extent of interpreting the data is collected only from particular cement industries.
- ◆ The financial details of the cement industries are collected for four years.
- ◆ This study based on the data and information provided in the reports of the particular industries.

## REVIEW OF LITERATURE

**Julius Enqvist (2014)** in his study entitled on “ **The impact of working capital management on firm profitability in different business cycles: Evidence from Finland**” stated about the recent economic downturn of 2007–2008 has brought renewed focus on working capital policies. In this paper they examine the role of business cycles on the working capital–profitability relationship using a sample of Finnish listed companies over an 18-year period. They find the impact of business cycle on the working capital–profitability relationship is more pronounced in economic downturns relative to economic booms. They further shows that the significance of efficient inventory management and accounts receivables conversion periods increase during periods of economic downturns. Their results demonstrate that active working capital management matters and, thus, should be included in firms’ financial planning.

**M. Reza Bradrania (2014)** in his study entitled on “**Characteristic liquidity, systematic liquidity and expected returns**” investigated whether the effect of liquidity on equity returns can be attributed to the liquidity level, as a stock characteristic, or a market wide systematic liquidity risk. They develop a CAPM liquidity-augmented risk model and test the characteristic hypothesis against the systematic risk hypothesis for the liquidity effect. They find that the two-factor systematic risk model explains the liquidity premium and the null hypothesis that the liquidity characteristic is compensated irrespective of liquidity risk loadings is rejected. This result is robust over 1931–2008 data and sub-samples of pre-1963 and post-1963 data both in the time-series and the cross-sectional analysis. Their findings provide clear guidance on the impact of liquidity on expected returns and can have practical implications in portfolio construction and investment strategies.

**Steven M. Fazzari and Bruce C. Petersen (2014)** in their study entitled “**Working Capital and Fixed Investment: New Evidence on Financing Constraints**” stated that new tests for finance constraints on investment by emphasizing the often neglected role of working capital as both as a use and a source of funds. The coefficient of endogenous working capital investment is negative in a fixed investment regression, as expected if working capital competes with fixed investment for a limited pool of finance this finding addresses a criticism of previous research on finance constraints, that cash flow may simply proxy shifts in investment demand, in addition, previous studies may have under estimated the impact of finance constraints on growth and investment because firms smooth fixed investment in time.

## RESEARCH METHODOLOGY

This study is based on secondary data. The secondary data needed for the study is collected from a source that has already been published. Mostly from annual reports of the particular industry, books, journals and periodicals. The main purpose of this study is to study the financial performance of the following cement industries:

1. ULTRA CEMENT
2. AMBUJA CEMENT
3. SHREE CEMENT
4. RAMCO CEMENT
5. BIRLA CORP
6. OCL INDIA – Orissa Cement Limited

## TOOLS

Multiple regression analysis tool is used for analysis

## PERIOD OF STUDY

The study covers the cement industries financial data of four years period from 2014-15 to 2017-2018

**Table no.1 Table showing multiple regression value for of Cement sector**

Company	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
ULTRA TECH	0.397	.158	.144	143.27269	.158	11.977	4	256	.000
AMBUJA CEMENT	0.892	.797	.793	8.68433	.797	250.578	4	256	.000
SHREE CEMENT	0.374	.140	.126	649.73164	.140	10.399	4	256	.000
RAMCO CEMENT	0.781	.611	.604	18.56586	.611	100.326	4	256	.000

BIRLA CORP	0.646	.417	.408	27.65898	.417	45.774	4	256	.000
OCL INDIA	0.452	.205	.192	31.87154	.205	16.457	4	256	.000

Table no.1 shows that model summary R representing the multiple correlation coefficient, shows the linear correlation between all the independent and dependent variables. The maximum the value of R, there will be a strong relationship between the predictor and criterion variables. In this, the value of R is .892, which is high, representing a correlation among the variables. R- Square is a square is a squared value of multiple correlation coefficients. The value of R- square is .793, which depicts that 793 % of the variance in share price can be predicted through 2017-2018, 2016-17, 2015-16 and 2014-15.

Similarly for all companies in this sectors like ULTRA TECH, SHREE CEMENT, RAMCO CEMENT, BIRLA CORP, OCL INDIA.

**Table no.2 Table showing Coefficients of Cement sector**

COMPANY	Model	Un standardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
ULTRATECH CEMENT	(Constant)	7473.994	797.078		9.377	.000
	2017-18	.003	.031	.005	.082	.934
	2016-17	-8.696	4.478	-.127	-1.942	.053
	2015-16	-7.911	1.980	-.488	-3.996	.000
	2014-15	-60.223	11.501	-.666	-5.236	.000
AMBUJA CEMENT	(Constant)	960.738	48.314		19.885	.000
	2017-18	.005	.002	.082	2.847	.005

	2016-17	-.127	.271	-.015	-.469	.639
	2015-16	-.305	.120	-.152	-2.538	.012
	2014-15	-11.308	.697	-1.014	-16.220	.000
<b>SHREE CEMENT</b>						
	(Constant)	13397.816	3614.693		3.706	.000
	2017-18	-.105	.142	-.043	-.736	.462
	2016-17	124.277	20.306	.404	6.120	.000
	2015-16	4.016	8.978	.055	.447	.655
	2014-15	-98.438	52.156	-.243	-1.887	.060
<b>RAMCO CEMENT</b>						
	(Constant)	575.860	103.289		5.575	.000
	2017-18	-.002	.004	-.017	-.432	.666
	2016-17	1.276	.580	.098	2.199	.029
	2015-16	-2.638	.257	-.854	-10.282	.000
	2014-15	-2.249	1.490	-.130	-1.509	.132
<b>BIRLA CORP</b>						
	(Constant)	1320.043	153.877		8.579	.000
	2017-18	.005	.006	.044	.904	.367
	2016-17	-9.279	.864	-.583	-10.735	.000
	2015-16	-1.394	.382	-.371	-3.648	.000
	2014-15	-8.114	2.220	-.387	-3.655	.000
<b>OCL INDIA</b>						
	(Constant)	854.419	177.313		4.819	.000
	2017-18	.005	.007	.042	.735	.463
	2016-17	-7.527	.996	-.480	-7.557	.000
	2015-16	-.883	.440	-.238	-2.006	.046
	2014-15	-1.383	2.558	-.067	-.541	.589

Table no.2 depicts the coefficients between variables when multiple regression analysis is applied. Beta coefficient reflects the change in the dependent variable for each unit change in the

independent variable. It can be used to compare the relative strength of various predictors within the model. Larger will be the beta coefficient, the smaller will be the significant level.

As per the table no.2, ULTRATECH CEMENT – 2017 to 2018 (Beta = .005,  $p > 0.01$ ), 2016-17 (Beta = -.127,  $P > 0.01$ ), 2015-16 (Beta = -.488,  $p < 0.01$ ) and 2014-15 (Beta = -.666,  $p < 0.01$ ) has largest beta coefficient which is statistically significance at the 1% and 0.1 % significance level. There is a relationship between 2017-2018, 2016-17 and share price and there is no relationship between 2015-16 and 2014-15 in predicting the share price.

As per the table no.2, AMBUJA CEMENT - 2017-2018 (Beta = .082,  $p > 0.01$ ), 2016-17 (Beta = -.015,  $P > 0.01$ ), 2015-16 (Beta = -.152,  $p > 0.01$ ) and 2014-15 (Beta = -1.014,  $p < 0.01$ ) has largest beta coefficient which is statistically significance at the 1% and 0.1 % significance level. There is a relationship between 2017-2018, 2016-17, 2015-16 and share price and there is no relationship between 2014-15 in predicting the share price.

As per the table no.2, SHREE CEMENT - 2017-2018 (Beta = -.043,  $p > 0.01$ ), 2016-17 (Beta = .404,  $P < 0.01$ ), 2015-16 (Beta = .055,  $p < 0.01$ ) and 2014-15 (Beta = -.243,  $p > 0.01$ ) has largest beta coefficient which is statistically significance at the 1% and 0.1 % significance level. There is a relationship between 2017-2018, 2014-15, 2015-16 and share price and there is no relationship between 2016-17 in predicting the share price.

As per the table no.2, RAMCO CEMENT - 2017-2018 (Beta = -.017,  $p > 0.01$ ), 2016-17 (Beta = .098,  $P > 0.01$ ), 2015-16 (Beta = -.854,  $p > 0.01$ ) and 2014-15 (Beta = -.130,  $p < 0.01$ ) has largest beta coefficient which is statistically significance at the 1% and 0.1 % significance level. There is a relationship between 2017-2018, 2016-17, 2014-15 and share price and there is no relationship between 2015-16 in predicting the share price.

As per the table no.2, BIRLA CORP - 2017-2018 (Beta = .044,  $p > 0.01$ ), 2016-17 (Beta = -.583,  $P > 0.01$ ), 2015-16 (Beta = -.371,  $p < 0.01$ ) and 2014-15 (Beta = -.387,  $p < 0.01$ ) has largest beta coefficient which is statistically significance at the 1% and 0.1 % significance level. There is a relationship between 2017-2018 and share price and there is no relationship between 2016-17, 2015-16 and 2014-15 in predicting the share price.

As per the table 4.22, OCL INDIA - 2017-2018 (Beta = .042,  $p > 0.01$ ), 2016-17 (Beta = -.480,  $P > 0.01$ ), 2015-16 (Beta = -.238,  $p > 0.01$ ) and 2014-15 (Beta = -.067,  $p < 0.01$ ) has largest beta coefficient which is statistically significance at the 1% and 0.1 % significance level. There is a relationship between 2017-2018, 2014-15, 2015-16 and share price and there is no relationship between 2016-17 in predicting the share price.

### Findings of the Study

- The value of R is highly predictable for the companies like AMBUJA CEMENT and RAMCO CEMENT from 2014-2015 to 2017-2018.
- The value of R is predictable for the companies like BIRLA CORP from 2014-2015 to 2017-2018.
- The value of R is not predictable for the companies like ULTRA TECH, SHREE CEMENT, and OCL INDIA 2014-2015 to 2017-2018.
- There is a relationship between 2017-18 and 2015-2016 in ULTRA TECH, AMBUJA CEMENT, SHREE CEMENT, RAMCO CEMENT, BIRLA CORP and OCL INDIA.
- There is a relationship between 2016-2017 and 2015-2016 in ULTRA TECH, AMBUJA CEMENT and RAMCO CEMENT.
- There is a relationship between 2014-2015 and 2015-2016 in SHREE CEMENT, RAMCO CEMENT and OCL INDIA.

### CONCLUSION:

The study evaluated the financial performance of the cement industries with a specific end goal to give better degree to financiers, shareholders, leasers and the administration themselves about the rating of the organizations and their execution. In India, iron and steel business assumes a noteworthy part in choosing the development of the nation. Steel industry has an extra ordinary growth and largest ventures in India that has built up a considerable measure in late decades. The study concludes that value of R is highly predictable for the companies like JSW STEEL and JINDAL STEEL . Hence the financial performance of both iron and steel industries are good.

The study would be quite useful in understanding the growth of the cement industries from 2014-2018. Proper allocation of finance in proper areas is very essential for the success of a business; otherwise it will affect the financial position of the cement industries. This project helps for effective financial decisions making and helps in effective utilization of finance. Majority of the cement industries growth is going high in every year. So in future the cement industries can get in to a good financial position. The cement industries taken for the study is matured one and it has contributed towards the current growth and development and will also continue to perform and contribute to the whole nation.

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