



PERFORMANCE ANALYSIS OF SELECT COMPANIES IN CEMENT INDUSTRY USING VARIOUS MODELS

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ABSTRACT

Cement Industry is in boom since liberalization in India. Cement is required from construction home to dam, from road to building everywhere cement will be utilized for the development of the country. The few companies are doing extremely very well for building the nation. This study covered the fundamental analysis of cement industry in India based on their market capitalization. The researcher used three major ratios to analyze the fundamentals of the company performance.

The study focuses on suggesting the investors to invest in a particular company in cement industry by analyzing the underneath facts affecting it. The investors often find it difficult to select a company which has capital growth in long run. Even though they have invested by analyzing the market, they end up losing money. Thus the study has developed four interrelated models to give investors a clear idea of how to analyze and in which companies should we invest.

Based on market capitalization, top five companies are chosen and the study is carried on those companies (Ultratech Cements, Shree Cements, Ambuja Cements, ACC cements, Dalmia Bharat). The study starts with developing a relative valuation model for the companies based on the current data. But for investment to be done, it is necessary to analyze the past performance of the data. Each company has different values for the ratios and there is sudden and lowering of the values. This was due to the external market conditions affecting the company.

Keywords: Fundamental Analysis, Relative Valuation Model, ROCE, Market capitalization, EPS, P/E Ratio.

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1. INTRODUCTION

Fundamental analysis is a method of evaluating a security in an attempt to measure its intrinsic value, by examining related economic, financial and other qualitative and quantitative factors. It is the study related to find anything that can affect the security's value, including macroeconomic factors such as the overall economy and industry conditions, and microeconomic factors such as financial conditions and company management. The end goal of fundamental analysis is to produce a quantitative value that an investor can compare with a security's current price, thus indicating whether the security is undervalued or overvalued.

Need for the study

To list out the top performing companies in the cement sector based on various models and certain parameters. Creating an awareness about investing in stock market

2. OBJECTIVES OF THE STUDY

- To identify the top companies to invest based on market capitalization
- To evaluate the performance of the companies in relative to certain parameters
- To find and suggest the best company to invest based on evaluation

3. LITERATURE SURVEY

Monica, Sowmiya (2016), aims at carrying out the Fundamental analyses of two leading companies of Cement sector and estimating their intrinsic value to assist investment decisions. Fundamental analysis tries to predict a stock's intrinsic or 'fundamental' value, and looks for opportunities where the current price deviates from the calculated intrinsic price. The cement industry is one of the core industries in India and is optimistic of posting good sales in the coming years. So, the investment in the shares and securities of KCP cements and Birla cements companies seems to be profitable. The study is done using secondary data collected from Reserve Bank of India website, BSE website and Company Annual Reports for the period of last five years from year 2010 to 2015.

Pankaj Soni (2015), studies the fundamental analysis of cement sector. The Fundamental analysis is based on Economic, Industry and Company (EIC) Analysis. The paper also develops a Multi-Regression Model for finding values of Cement Company's share prices (Dependent Variable) through 4 parameters that is SENSEX, IIP, CPI and Realty Index (Independent Variable). For this regression analysis was done on monthly share prices and other variables from last 5 years and was tested. The model worked.

Sayed Mohammad (2011), states that India is the world's second largest producer of cement behind China with ever growing industry capacity of over 200 plus million tonnes (MT) and has left behind developed markets such as the US and Japan. It is a highly capital-intensive industry and operates with a high level of fixed cost. For smooth running of cement industry it is important to have overall balanced projection. The current scenario of Cement industry in India is more concerned of solving the consumer complaints, resolve disputes with special attention given to public interface.

Dharmendra S Mistry (2011), states that Dividend decision is one of the most important functions of finance managers. It depends on the trend of the turnover and control of the management over the expenditure. It also affects the decision of potential investors regarding investment in company's equity and overall market value of the company's share. In this paper, an attempt has been made to ascertain influence of the factors i.e. Total Assets, Liquidity, Inventory Turnover Ratio, Profitability and Retained Earnings on the dividend

decision of Indian cement industry for a period of 2004-05 to 2008-09 based on the secondary data of 28 out of 36 listed public companies in the industry.

4. RESEARCH METHODOLOGY

Top 5 companies are taken for analysis based on their revenue in last financial years. The company must be listed in National Stock Exchange (NSE) India. The analysis is based on secondary data published by the respective companies. The following companies were selected for data analysis.

1. UltraTech Cement
2. Shree Cement
3. Ambuja Cement
4. ACC Cement
5. Dalmia Bharat

Period of the Study

The study covers the 5 financial years as period from 2012-13 to 2016-17.

Data Analysis

The following important ratios were measured to analyze the fundamental factors of the companies.

5, DATA ANALYSIS TOOLS

Investors find difficulty in investing in equity market. Thus the project develops various models based on various parameters to help investors invest in best companies in Cement industry so that they earn profits at steady growth. Though the past performance alone can be indicative of future performance, it is frankly, the only quantitative way to judge how good a fund is at present. The methods used for analyzing the data are:

- Relative Valuation Model
- Multiple regression
- Ratio Analysis & ANOVA

5.1. Relative Valuation Model

The model has been built for finding the best companies in cement industry based on the benchmark value and multiples.

Steps in Relative Valuation Model

Step 1: Choose the top 10 companies in cement industry based on market capitalization. Note down the share price, market capitalization, EPS, P/E ratio of the corresponding companies

Table 1 Choosing the companies

Company Name	Stock Price	Market Cap (Rs. cr)	P/E Ratio	EPS	Previous year EPS
UltraTechCement	4,030.00	1,10,617.26	42.21	95.48	83.33
Shree Cements	17,723.00	61,744.00	49.08	361.09	130.58
Ambuja Cements	248.15	49,273.79	42.64	5.82	5.65
ACC	1,485.55	27,896.74	46.31	32.08	32.19
Dalmia Bharat	2,135.05	18,994.64	231.57	9.22	23.36
Ramco Cements	668.25	16,036.45	22.30	29.97	23.00
J. K. Cement	935.00	6,538.20	27.39	34.14	9.06
OCL India	1,009.50	5,744.08	14.17	71.22	41.12
Birla Corp	744.00	5,729.20	21.18	35.13	20.44
JK Lakshmi Cem	462.90	5,446.95	49.67	9.32	1.27

Inference:

Only one of the top 10 companies is Overvalued rest are Undervalued. Undervalued companies have the probability of going high in future i.e., in long term, while the overvalued companies tend to fall as they have reached their highest point.

Step 2: Valuation of Stocks

Identify the industry P/E of cement industry and compare the individual company's P/E to determine if the stock is Undervalued (UV) or Overvalued (OV).

P/E industry > P/E company → UV

P/E industry < P/E company → OV

Table 2 Valuation of stocks

Company Name	Stock Price	Market Cap (Rs. cr)	P/E Ratio	EPS	Previous year EPS	(OV/UV)
UltraTechCement	4,030.00	1,10,617.26	42.21	95.48	83.33	UV
Shree Cements	17,723.00	61,744.00	49.08	361.09	130.58	UV
Ambuja Cements	248.15	49,273.79	42.64	5.82	5.65	UV
ACC	1,485.55	27,896.74	46.31	32.08	32.19	UV
Dalmia Bharat	2,135.05	18,994.64	231.57	9.22	23.36	OV
Ramco Cements	668.25	16,036.45	22.30	29.97	23.00	UV
J. K. Cement	935.00	6,538.20	27.39	34.14	9.06	UV
OCL India	1,009.50	5,744.08	14.17	71.22	41.12	UV
Birla Corp	744.00	5,729.20	21.18	35.13	20.44	UV
JK Lakshmi Cem	462.90	5,446.95	49.67	9.32	1.27	UV

Inference:

Eight companies of the top 10 companies have a value pick i.e., their current EPS is greater than the previous year EPS.

Industry P/E = 53.86

Only Dalmia Bharat is Overvalued as it has a P/E ratio of 231.57 which is greater than industry P/E. All other companies are Undervalued

Step 3: Value Pick

Consider the undervalued companies from the previous and calculate EPS change i.e., if the current EPS is greater than previous year EPS

% Change = $\frac{\text{Current year EPS} - \text{Previous year EPS}}{\text{Previous year EPS}} \times 100$

Previous year EPS

If % change is positive, the stock has a value pick, else no value pick.

Table 3 Value Pick

Company Name	EPS	Previous year EPS	(OV/UV)	% Changes	Value Pick
UltraTechCement	95.48	83.33	UV	15%	Yes
Shree Cements	361.09	130.58	UV	177%	Yes
Ambuja Cements	5.82	5.65	UV	3%	Yes
ACC	32.08	32.19	UV	0%	
Dalmia Bharat	9.22	23.36	OV	-61%	
Ramco Cements	29.97	23.00	UV	30%	Yes
J. K. Cement	34.14	9.06	UV	277%	Yes
OCL India	71.22	41.12	UV	73%	Yes
Birla Corp	35.13	20.44	UV	72%	Yes
JK Lakshmi Cem	9.32	1.27	UV	634%	Yes

Inference:

The companies which were found undervalued in the previous step are further calculated for value pick. All companies except of ACC have a value pick among UV companies

Step 4: Calculate LTPT

LTPT (Long Term Price Target) is the projected price level of a financial security stated by an investment analyst or advisor. This is the price at which the trader or investor wants to exit his existing position so he can realize the most reward.

$$\text{LTPT} = \text{Sector P/E} * \text{Current Year EPS}$$

Table 4 LTPT

Company Name	P/E Ratio	EPS	(OV/UV)	LTPT
UltraTechCement	42.21	95.48	UV	5142.55
Shree Cements	49.08	361.09	UV	19448.31
Ambuja Cements	42.64	5.82	UV	313.47
ACC	46.31	32.08	UV	1727.83
Dalmia Bharat	231.57	9.22	OV	496.59
Ramco Cements	22.30	29.97	UV	1614.18
J. K. Cement	27.39	34.14	UV	1838.78
OCL India	14.17	71.22	UV	3835.91
Birla Corp	21.18	35.13	UV	1892.10
JK Lakshmi Cem	49.67	9.32	UV	501.98

Inference:

LTPT is the value until which the stock can be held and after that could be sold. Shree Cements, JK, Birla Corp and OCL have the highest scope for increment in future.

Step 5: Growth Picks

Consider the Overvalued companies and compute the growth pick

$$\text{Growth Rate} = \frac{\text{Current year EPS}}{\text{Previous year EPS}}$$

$$\text{Previous year EPS}$$

Table 5 Growth Pick

Company Name	P/E Ratio	EPS	Previous year EPS	(OV/UV)	EPS Growth
UltraTechCement	42.21	95.48	83.33	UV	1.15
Shree Cements	49.08	361.09	130.58	UV	2.77
Ambuja Cements	42.64	5.82	5.65	UV	1.03
ACC	46.31	32.08	32.19	UV	1.00
Dalmia Bharat	231.57	9.22	23.36	OV	0.39
Ramco Cements	22.30	29.97	23.00	UV	1.30
J. K. Cement	27.39	34.14	9.06	UV	3.77
OCL India	14.17	71.22	41.12	UV	1.73
Birla Corp	21.18	35.13	20.44	UV	1.72
JK Lakshmi Cem	49.67	9.32	1.27	UV	7.34

Step 6: PEG Ratio

PEG ratio is computed for the overvalued companies. The value of PEG should lie between 0 to 1 so that it is considered good to invest.

$$\text{PEG Ratio} = \frac{\text{P/E Ratio}}{\text{Growth Rate}}$$

Growth Rate

Table 6 PEG Ratio

Company Name	P/E Ratio	EPS	Previous year EPS	(OV/UV)	EPS Growth	PEG
UltraTechCement	42.21	95.48	83.33	UV	1.15	0.37
Shree Cements	49.08	361.09	130.58	UV	2.77	0.18
Ambuja Cements	42.64	5.82	5.65	UV	1.03	0.41
ACC	46.31	32.08	32.19	UV	1.00	0.46
Dalmia Bharat	231.57	9.22	23.36	OV	0.39	5.87
Ramco Cements	22.30	29.97	23.00	UV	1.30	0.17
J. K. Cement	27.39	34.14	9.06	UV	3.77	0.07
OCL India	14.17	71.22	41.12	UV	1.73	0.08
Birla Corp	21.18	35.13	20.44	UV	1.72	0.12
JK Lakshmi Cem	49.67	9.32	1.27	UV	7.34	0.07

Inference:

PEG ratio should lie between 0 to 1 for investing. PEG ratio is found for OV companies. Dalmia Bharat has 5.38 PEG ratio. Hence it could not be selected as it has already reached the highest level of growth.

5.2. Multiple Regression

Dependent Variable: Share Price of Cement sector companies.

Independent Variable: Earnings Per Share, Dividend Per Share, Inflation Rate, Gross Domestic Product Rate.

Regression Statistics for Ultratech Cements**Table 7** Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.982 ^a	.965	.859	271.91828	1.402

a. Predictors: (Constant), GDP Rate, EPS, DPS, Inflation

b. Dependent Variable: Stock Price

Table 4.2.1.b ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	2026986.043	3	675662.014	9.138	.237 ^a
Residual	73939.549	1	73939.549		
Total	2100925.592	4			

a. Predictors: (Constant), GDP Rate, EPS, DPS, Inflation

b. Dependent Variable: Stock Price

Table 8 Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	8016.648	4323.914		1.854	0.315
EPS	249.116	93.602	3.257	2.661	0.229
DPS	-8904.68	3143.915	-6.73	-2.832	0.216
GDP Rate	7526.639	2458.168	9.327	3.062	0.201
Inflation	-418.505	3013.558	-1.363	-0.139	0.912

a. Dependent Variable: Stock Price

Inference:

The significance value is greater than 0.05 hence accept the alternate hypothesis. The independent factors (EPS, DPS, Inflation and GDP rate) affect the stock price (dependent variable).

Regression Statistics for Shree Cements**Hypothesis Testing**

H₀: There is no significant relationship between Stock Price and EPS, DPS, GDP Rate, Inflation Rate

H_a: There is no significant relationship between Stock Price and EPS, DPS, GDP Rate, Inflation Rate

Table 9 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.945 ^a	.892	.569	2246.06683	3.598

a. Predictors: (Constant), GDP Rate, EPS, DPS, Inflation

b. Dependent Variable: Stock Price

Table 10 ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	4.182E7	3	1.394E7	2.763	.410 ^a
Residual	5044816.209	1	5044816.209		
Total	4.687E7	4			

a. Predictors: (Constant), GDP Rate, EPS, DPS, Inflation

b. Dependent Variable: Stock Price

Table 11 Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	9704.79	97141.5		0.1	0.937
EPS	-38.077	99.283	-0.77	-0.384	0.767
DPS	-1398.29	6991.035	-0.817	-0.2	0.874
GDP Rate	4929.925	10922.63	1.293	0.451	0.73
Inflation	1925.454	1004.631	1.328	1.917	0.306

a. Dependent Variable: Stock Price

Inference:

The significance value is greater than 0.05 hence accept the alternate hypothesis. The independent factors (EPS, DPS, Inflation and GDP rate) affect the stock price (dependent variable).

5.3. Ratio Analysis and Anova***Working Capital Ratio***

The working capital ratio (Current Assets/Current Liabilities) indicates whether a company has enough short term assets to cover its short term debt. Anything below 1 indicates negative working capital. While anything over 2 means that the company is not investing excess assets. Most believe that a ratio between 1.2 and 2.0 is sufficient.

$$\text{Working Capital ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Table 3.1.a Working Capital Ratio

Year	<u>Ultratech</u> Cements	<u>Shree</u> Cements	<u>Ambuja</u> Cements	ACC	<u>Dalmia</u> Bharat
2016	0.87	1.73	1.08	1.00	1.49
2015	0.80	1.61	2.02	0.90	1.59
2014	1.45	1.56	1.90	0.97	1.23
2013	1.17	1.6	1.91	1.35	4.45
2012	1.37	1.35	1.74	1.42	4.22

Interpretation:

Thus from the above data it is evident that Shree Cements has the approximate WC ratio and is steady for all the 5 years with not much difference. Moreover it has a growth of about 3 to 7% each year. ACC and Dalmia Bharat have a steady growth but are not up to the standard ratio. Hence it is clear that **Shree Cements** dominates the industry in paying the short term liability.

ANOVA:***Hypothesis Testing***

Ho: Current Ratio of Ultratech, Shree cements, Ambuja Cements, ACC Cements & Dalmia Bharat does not differ significantly.

Ha: Current Ratio of Ultratech, Shree cements, Ambuja Cements, ACC Cements & Dalmia Bharat does differ significantly.

Table 3.1.b One Way ANOVA for Working Capital Ratio

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.316	4	.329	3.793	.040
Within Groups	.868	10	.087		
Total	2.184	14			

Inference:

The significant value 0.04 is less than 0.05. Hence we reject the null hypothesis. Thus at 95% confidence interval it can be concluded that there is a significant difference between the current ratio of different companies.

Earnings Per Share

Earnings per share (EPS) are the portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serves as an indicator of a company's profitability.

$$\text{Earnings per share} = \frac{\text{Profit after tax} - \text{Preference dividend}}{\text{No. of Equity Share}}$$

Table 3.2.a Earnings Per Share

Year	Ultratech Cements	Shree Cements	Ambuja Cements	ACC	Dalmia Bharat
2016	83.33	130.58	5.65	32.19	23.36
2015	76.48	122.37	5.21	31.30	0.38
2014	80.45	225.97	9.61	61.88	-1.04
2013	97.69	288.19	8.28	58.31	5.09
2012	87.69	177.54	8.41	56.42	3.99

Interpretation:

Shree Cements has the highest EPS among the 5 companies. But from the year 2014 to 2015 the EPS of all companies has declined due to change in the production capacity of all companies and the corresponding political policies. Despite, in the year 2016 all the companies managed to mark their pace. Shree Cements instead having highest EPS, hasn't regained from the decline. But **Dalmia Bharat** has outperformed the industry.

ANOVA:***Hypothesis Testing***

Ho: Earnings Per Share of Ultratech, Shree cements, Ambuja Cements, ACC Cements & Dalmia Bharat does not differ significantly.

Ha: Earnings per Share of Ultratech, Shree cements, Ambuja Cements, ACC Cements & Dalmia Bharat does differ significantly.

Table 3.2.b One Way ANOVA for Earnings Per Share

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	48696.839	4	12174.210	15.919	.000
Within Groups	7647.502	10	764.750		
Total	56344.341	14			

Inference:

The significant value 0.000 is less than 0.05. Hence we reject the null hypothesis. Thus at 95% confidence interval it can be concluded that there is significant difference between the earnings per share of different companies.

Price Earning Ratio

Lower the P/E ratio of a company as compared to its peers, the cheaper it is. Shree Cement was priced competitively initially

$$\text{Price Earning Ratio} = \frac{\text{Market Price}}{\text{Earning Per Share}}$$

Earning Per Share

Table 3.3.a Price Earnings Ratio

Year	<u>Ultratech Cements</u>	<u>Shree Cements</u>	<u>Ambuja Cements</u>	<u>ACC</u>	<u>Dalmia Bharat</u>
2016	35.4	86.9	37.9	43.0	30.3
2015	35.0	78.7	20.6	20.5	1193.9
2014	22.4	25.2	21.7	20.3	-174.8
2013	17.0	13.9	21.3	23	6.1
2012	14.0	13.7	17.4	15.5	8.1

Interpretation:

In the mid stage, Dalmia Bharat became more expensive. In the latest stages, again Shree Cements is priced high. All the other three companies have shown a steady increase in their P/E ratio with time. But **Ultratech** has steady trend over years as compared to other companies

ANOVA:***Hypothesis Testing***

Ho: Price Earning Ratio of Ultratech, Shree cements, Ambuja Cements, ACC Cements & Dalmia Bharat does not differ significantly.

Ha: Price Earning Ratio of Ultratech, Shree cements, Ambuja Cements, ACC Cements & Dalmia Bharat does differ significantly.

Table 3.3.b One Way ANOVA for Price Earnings Ratio

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	237169.840	4	59292.460	.543	.708
Within Groups	1092673.160	10	109267.316		
Total	1329843.000	14			

The significant value 0.708 is greater than 0.05. Hence we accept the null hypothesis. Thus at 95% confidence interval it can be concluded that there is no significant difference between the Price Earnings Ratio of different companies

6. FINDINGS

Relative Valuation Model

- 9 out of 10 companies were found undervalued and 1 overvalued
 - Undervalued
 - Overvalued
 - Ultratech Cements
 - Dalmia Bharat Cements
 - Shree Cements
 - Ambuja Cements
 - ACC Cements
 - Ramco Cements
 - JK Cements
 - Birla Corp Cements
 - OCL Cements
 - JK Lakshmi Cements
- Among the undervalued companies all had a value pick i.e., they had a growth in their current EPS then of their previous EPS, except ACC cements. Thus ACC cements is neglected.
- LTPT is the value until which the stock of an undervalued company can be held and after which it should be sold. Shree cements, JK cements, OCL and Birla Corp have the highest range for price increment.
- For overvalued companies PEG (Price Earnings Growth) ratio is used to determine its further growth value. The ratio should lie between 0 to 1. But for Dalmia Cements (the only overvalued company) the ratio is 5.38, which indicates that it has reached the highest point and has more probability of falling down anytime.

Multiple Regression Model

Factors affecting the different companies are tabulated below
Ultratech Cements

Table 4.1.a

Dependent Variables	Independent Variables	Rate (%)
Stock Price	EPS	20.7
	DPS	29.5
	Inflation	46.5
	GDP Rate	56.5
Overall		85.92

Shree Cements

Table 4.1.b

Dependent Variables	Independent Variables	Rate (%)
Stock Price	EPS	26.7
	DPS	82.1
	Inflation Rate	56.6
	GDP Rate	69.4
Overall		56.9

Based on the above tabulations it is found that Ambuja Cements is least affected by the external factors with 47.4% followed by Shree Cements. It is also found that Ultratech is more prone to external factors with an affecting rate of 85.92%.

Ratio Analysis

- Shree Cements dominates the industry in paying the short term liability. ACC and Dalmia Bharat have a steady growth but are not up to the standard ratio.
- Shree Cements instead having highest EPS, hasn't regained from the decline. But Dalmia Bharat has outperformed the industry.

ANOVA

The companies differ significantly in terms of current ratio. There is no relation between any of the companies since all of the significant values are lesser than 0.05.

Table 4.2 Multiple Comparisons

Current ratio

Tukey HSD

(I) Companies	(J) Companies	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Ultratech	Shree	-.59333	.24051	.175	-1.3849	.1982
	Ambuja	-.62667	.24051	.142	-1.4182	.1649
	ACC	.08333	.24051	.996	-.7082	.8749
	Dalmia	-.39667	.24051	.502	-1.1882	.3949
Shree	Ultratech	.59333	.24051	.175	-.1982	1.3849
	Ambuja	-.03333	.24051	1.000	-.8249	.7582
	ACC	.67667	.24051	.104	-.1149	1.4682
	Dalmia	.19667	.24051	.919	-.5949	.9882
Ambuja	Ultratech	.62667	.24051	.142	-.1649	1.4182
	Shree	.03333	.24051	1.000	-.7582	.8249
	ACC	.71000	.24051	.084	-.0815	1.5015
	Dalmia	.23000	.24051	.868	-.5615	1.0215
ACC	Ultratech	-.08333	.24051	.996	-.8749	.7082
	Shree	-.67667	.24051	.104	-1.4682	.1149
	Ambuja	-.71000	.24051	.084	-1.5015	.0815
	Dalmia	-.48000	.24051	.333	-1.2715	.3115
Dalmia	Ultratech	.39667	.24051	.502	-.3949	1.1882
	Shree	-.19667	.24051	.919	-.9882	.5949
	Ambuja	-.23000	.24051	.868	-1.0215	.5615
	ACC	.48000	.24051	.333	-.3115	1.2715

7. IMPLICATIONS

- Based on relative valuation model, For long term investors it is better to invest in undervalued companies which a scope of growth and based on the LTPT value Shree and Ambuja cements are best companies to invest
- For short term investors, overvalued is best to invest but Dalmia Bharath as already reached the highest point of PEG (5.38). Hence it is better not to invest
- Based on multiple regression Ambuja Cements is least affected by external factors
- Shree Cements dominates the industry by having most of the ratios having its positivity, but based on ANOVA, Ambuja and Shree are significantly related to each other.

8. LIMITATIONS

- The study covered only last five years based on financial reports published by the company.
- The study took top five companies based on market capitalization and more specific it had covered only cement industry of India.
- It covered only the fundamental analysis of the companies and other factors remain constant.

9. CONCLUSIONS

From the analysis of Indian economy, we have found that Indian economy is one of the growing economies of the World. In India inflation rate has declined in last two years. Due to this up to some extent control on cost of raw - materials and other expenses is possible. Under cement industry all the companies intrinsic values are lesser than the market price which is not suitable for long term investments but can go for speculations to get margin of profit.

Fundamental analysis is analysing the basic financials of the company from the balance sheet and income statement to consider it for further investment. The study initially has considered the stock price and then based on the data, has successfully applied fundamental tools like ratio analysis and statistical tools to determine the health of a company based on the past data.

The project has determined that the investment is surely dependent on the past performance of the company, the external factors (economic) and obviously the price of the stock. The results vary for different models and on different perspectives of people i.e., for high and quick growth, steady growth, high profits, less affected by external factors and so on.

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