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AN ANALYSIS OF WORKING CAPITAL MANAGEMENT OF SELECTED STEEL AND CEMENT COMPANIES OF INDIA

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Abstract

Since, working capital is an important factor for any company. It plays a role as a life book in financial matter. This paper attempts to study the trends of working capital positions of the five selected companies belongs to cement Industry and five selected companies belongs to steel Industry. To conduct analysis, ratio analysis technique used as accounting technique and different statistical tools and techniques are used like, Average (Mean X), Variance, and ANOVA (single factor). The paper attempts to find out the significant relation in Financial Leverage between the selected Cement companies and Steel companies.

Keywords : Working Capital, Capital Structure, Financial Leverage.

INTRODUCTION

"Working Capital is the Life-Blood and Controlling Nerve Center of a business"

The working capital management precisely refers to management of current assets. A firm's working capital consists of its investment in current assets, which include short-term assets such as:

- Cash and bank balance,
- Inventories,
- Receivables (including debtors and bills),
- Marketable securities.
- Working capital is commonly defined as the difference between current assets and current liabilities.

The word working capital comprises of two words 'working' and 'capital'. In trade and industry, the word 'working' with reference to capital means circulation of capital from one form to another during day-to-day operations of the business whereas the word 'capital' refers to the monetary values of all the assets (tangible and intangible) of the business.

The Management Of Working Capital Is Important For Several Reasons:

- For one thing, the current assets of a typical manufacturing firm account for half of its total assets. For a distribution company, they account for even more.
- Working capital requires continuous day to day supervision. Working capital has the effect on company's risk, return and share prices,
- There is an inevitable relationship between sales growth and the level of current assets. The target sales level can be achieved only if supported by adequate working capital Inefficient working capital management may lead to insolvency of the firm if it is not in a position to meet its liabilities and commitments.

LITERATURE REVIEW

N'togwa Ng'habi Bundala (2014) conducted a study on "Does capital structure influence working capital intensity and growth opportunity of a firm ".The core objective of his study is to examine the effect of capital structure on working capital intensity and growth opportunity of Tanzanian listed companies .Descriptive study has been used by taking a sample of 10 listed companies listed on Dar Es Salam Stock Exchange .Using multiple regression model his study resulted that listed company of Tanzania are unleveraged and growing fast and are illiquidity. He also found significant relation between capital structure, working capital intensity and growth opportunity.

Jane Wanjiku Muiruri, Dr.Nemwel Boisre (2014) did a research over the topic "Determinants of capital structure decisions of listed insurance companies in Kenya".A survey of insurance company in nakuru town. Sample consists of 6 listed insurance company in which 50 branch managers and unit manager targeted. Purposive sampling techniques used to select 50 responses among the branch and unit manager.Primary data collected using questionnaire .For data analysis purpose descriptive and inferential statistics was used. Based on their conclusion they found that profitability was the main determinants of capital structure .Also Positive Relationship Found between Profit and Size of Firm.

Syed Atif Ali,Dr.Shahid Azia &Amir Razi (2012) done a analytical study on "Impact of capital structure on the profitability of petroleum sector in Pakistan "For this purpose sample of 12 petroleum companies was randomly selected for the period of 2001-2010.Regression analysis was conducted. Their study shows the overall capital structure found to be significant but the individual analysis of every company has no significance because every company has their own capital structure as well as it also shows the positive impact of capital structure on profitability of the petroleum sector .Only two companies oil and gas development and Pakistan petroleum has the significant relation between the capital structure and the profitability.

RESEARCH OBJECTIVE

1. To study the trends of working capital positions of the selected companies in cement Industry.
2. To study the trends of working capital positions of the selected companies in steel Industry.

SAMPLE SIZE

For this research study, researcher has taken 2 Industries and 5 companies from each industry. Total 10 companies has been analysed for this research study

CEMENT	1. Ambuja Cements Limited
	2. JK Lakshmi Cement Ltd
	3. Birla Corporation Limited
	4. UltraTech Cement Limited
	5. ACC Limited
STEEL	1. Steel Authority of India Limited
	2. Tata Steel Limited
	3. JSW Steel Ltd
	4. Jindal Steel and Power Limited
	5. VISA Steel Limited

TIME PERIOD

The present study covers the period of ten years spanning from the year 2007-08 to 2016-17. The period of ten years is sufficient to infer the results. Moreover many of the companies were incorporated before this period and the complete data of five years is available, so researcher has selected this period of time.

DATA ANALYSIS METHOD

For the purpose of financial performance analysis of selected Indian companies of Steel and Cement sector, following accounting and statistical tools and techniques are used.

Accounting Technique:
1. Ratio analysis

Statistical technique:
1. Average (Mean X)
2. Variance
3. ANOVA: single factor

RESEARCH HYPOTHESIS

Below mentioned hypothesis has been tasted in this research study

NULL HYPOTHESIS

1. H0 : There is no significant relation in Financial Leverage between the selected Cement companies
2. H0 : There is no significant relation in Financial Leverage between the selected Steel companies
3. H0 : There is no significant relation in Financial Leverage between the selected Cement and Steel companies

ALTERNATIVE HYPOTHESIS

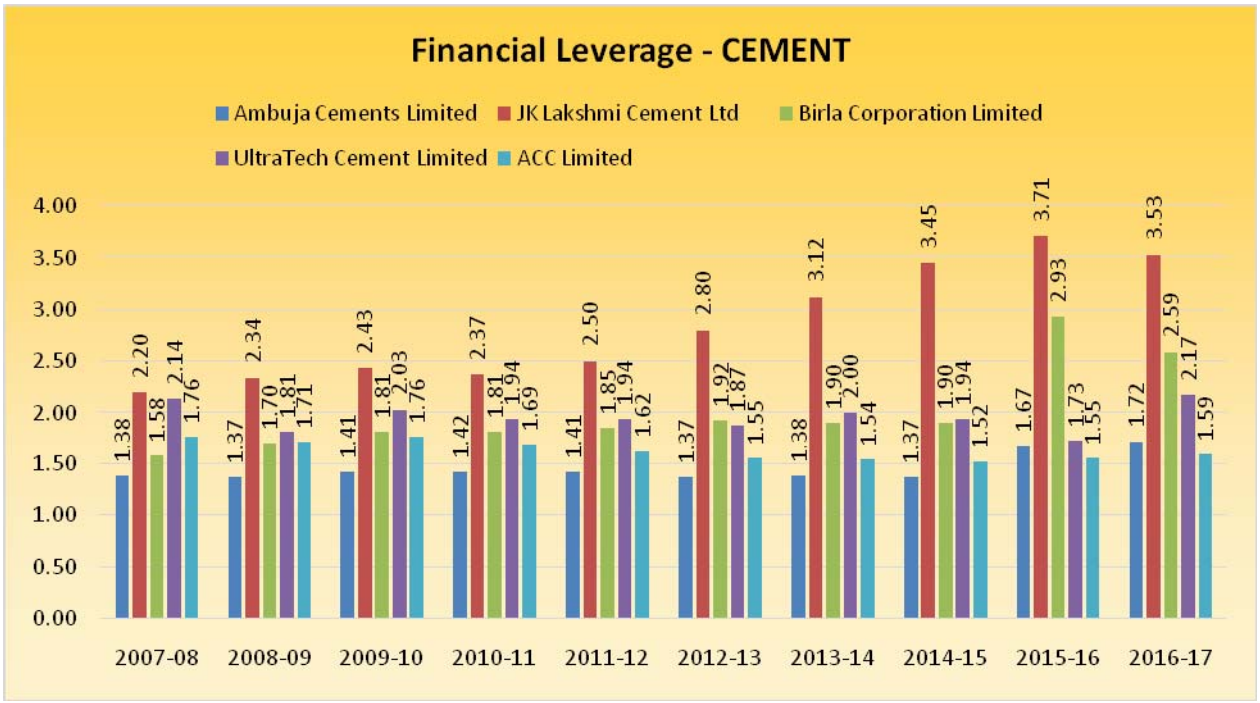
1. H1 : There is significant relation in Financial Leverage between the selected Cement companies
2. H1 : There is significant relation in Financial Leverage between the selected Steel companies
3. H1 : There is significant relation in Financial Leverage between the selected Cement and Steel companies

DATA ANALYSIS

FINANCIAL LEVERAGE

Table 1 - Financial Leverage of Cement Companies

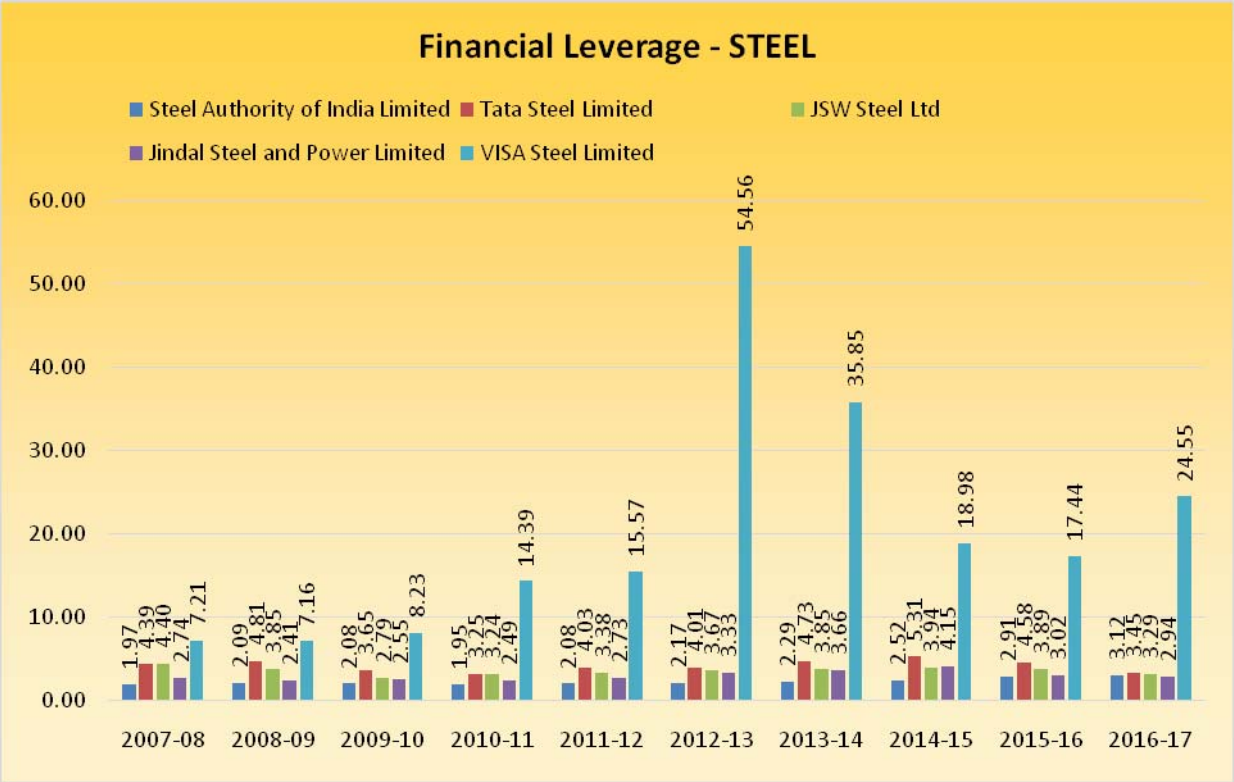
Financial Leverage										
COMPANY	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Ambuja Cements Limited	1.38	1.37	1.41	1.42	1.41	1.37	1.38	1.37	1.67	1.72
JK Lakshmi Cement Ltd	2.20	2.34	2.43	2.37	2.50	2.80	3.12	3.45	3.71	3.53
Birla Corporation Limited	1.58	1.70	1.81	1.81	1.85	1.92	1.90	1.90	2.93	2.59
UltraTech Cement Limited	2.14	1.81	2.03	1.94	1.94	1.87	2.00	1.94	1.73	2.17
ACC Limited	1.76	1.71	1.76	1.69	1.62	1.55	1.54	1.52	1.55	1.59



Graph 1 - Financial Leverage of Cement Companies

Table 2 - Financial Leverage of Steel Companies

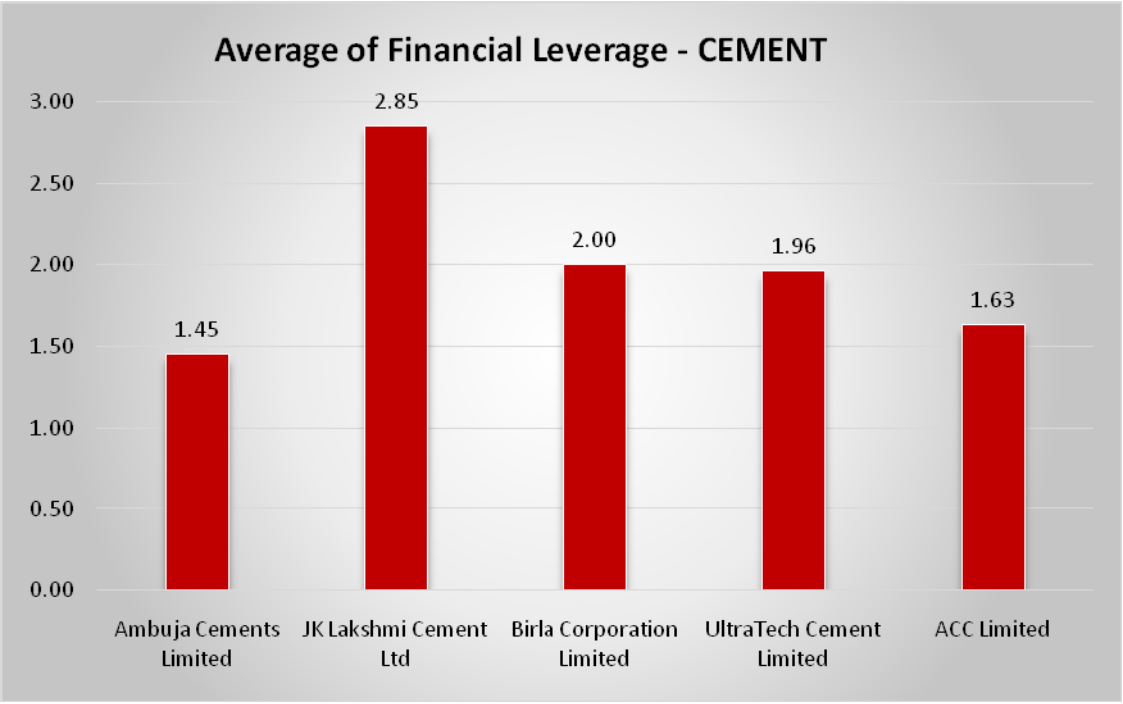
Financial Leverage										
COMPANY	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Steel Authority of India Limited	1.97	2.09	2.08	1.95	2.08	2.17	2.29	2.52	2.91	3.12
Tata Steel Limited	4.39	4.81	3.65	3.25	4.03	4.01	4.73	5.31	4.58	3.45
JSW Steel Ltd	4.40	3.85	2.79	3.24	3.38	3.67	3.85	3.94	3.89	3.29
Jindal Steel and Power Limited	2.74	2.41	2.55	2.49	2.73	3.33	3.66	4.15	3.02	2.94
VISA Steel Limited	7.21	7.16	8.23	14.39	15.57	54.56	35.85	18.98	17.44	24.55



Graph 2 - Financial Leverage of Steel Companies

Table 3 - Average of Financial Leverage of Cement Companies

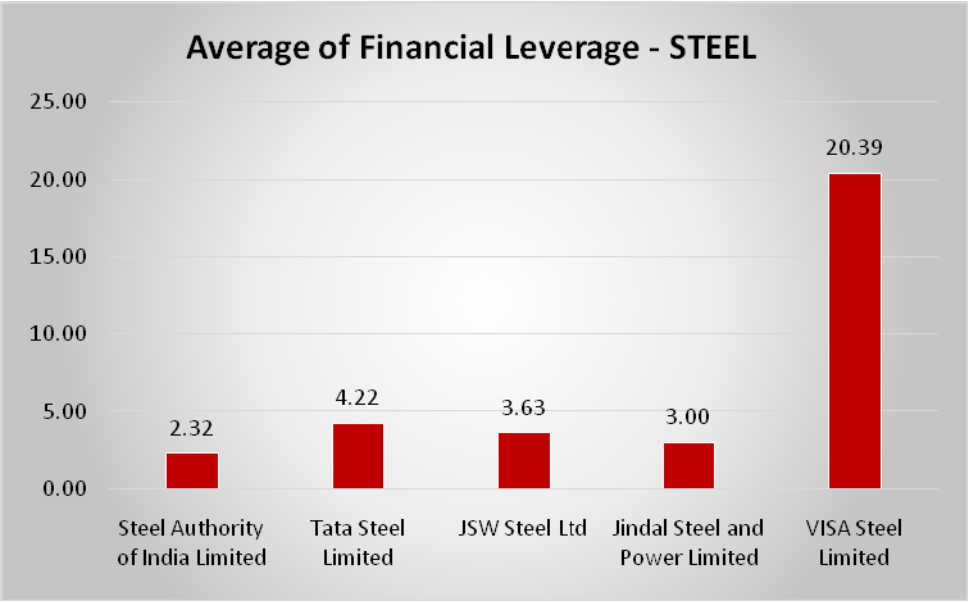
Average of Financial Leverage - CEMENT	
Ambuja Cements Limited	1.45
JK Lakshmi Cement Ltd	2.85
Birla Corporation Limited	2.00
UltraTech Cement Limited	1.96
ACC Limited	1.63



Graph 3 - Average of Financial Leverage of Cement Companies

Table 4 - Average of Financial Leverage of Steel Companies

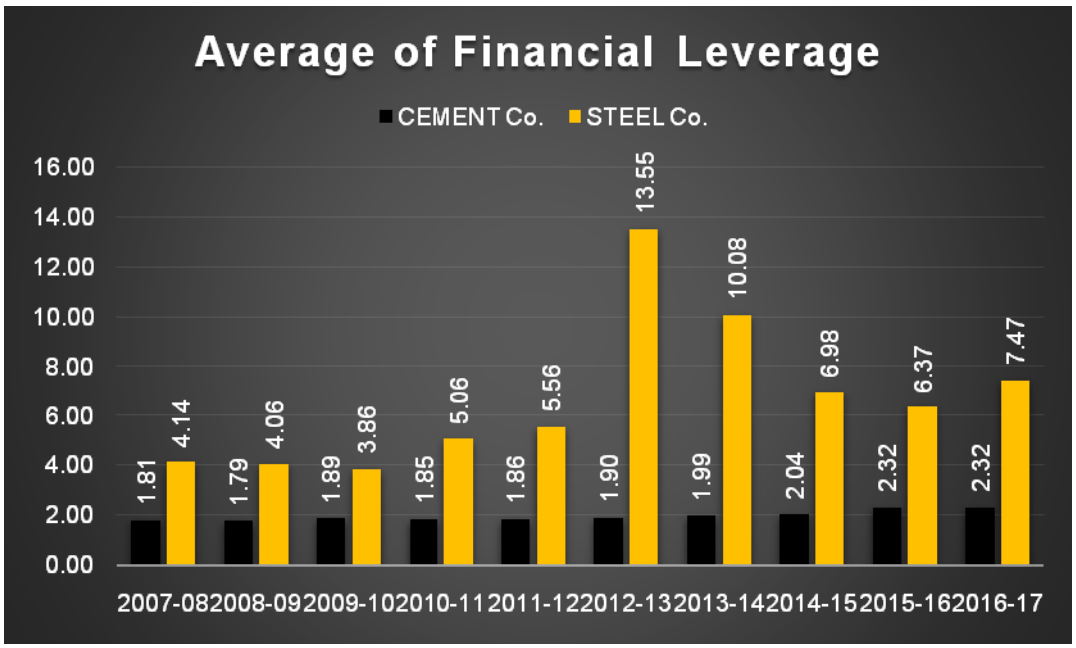
Average of Financial Leverage - STEEL	
Steel Authority of India Limited	2.32
Tata Steel Limited	4.22
JSW Steel Ltd	3.63
Jindal Steel and Power Limited	3.00
VISA Steel Limited	20.39



Graph 4 - Average of Financial Leverage of Steel Companies

Table 5 - Average of Financial Leverage by year

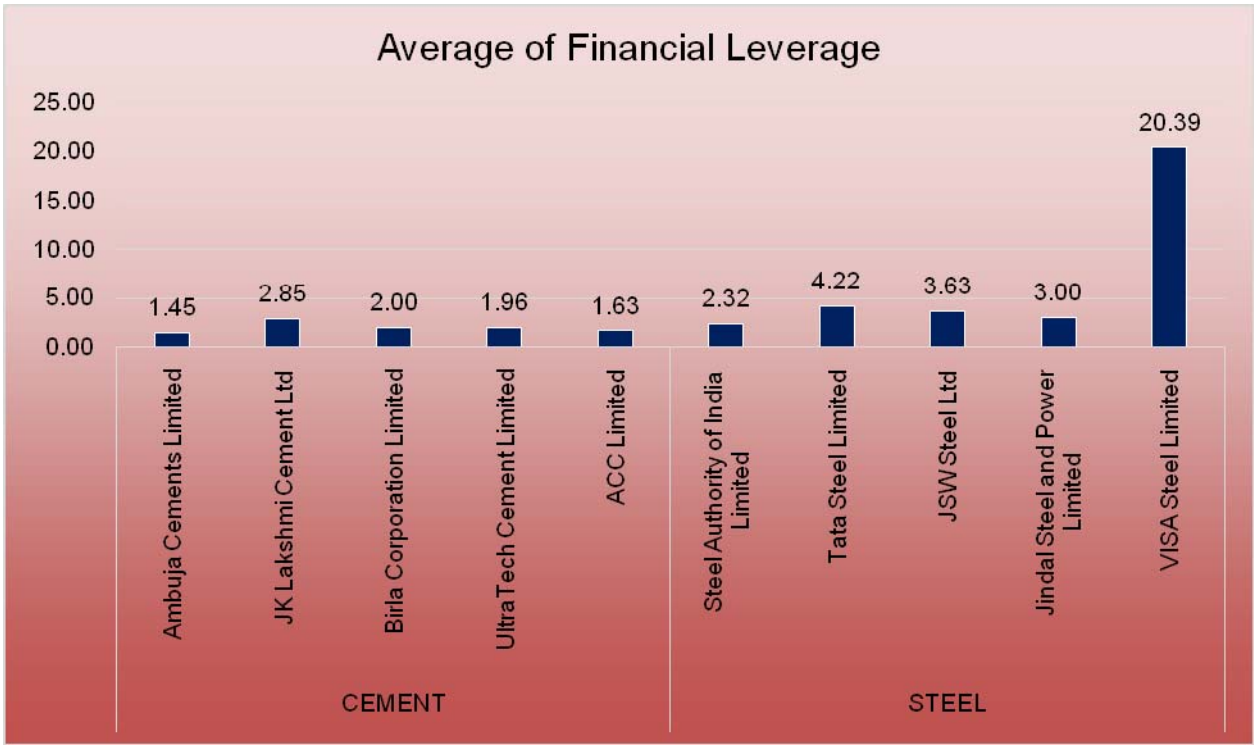
Average of Financial Leverage										
COMPANY	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
CEMENT Co.	1.81	1.79	1.89	1.85	1.86	1.90	1.99	2.04	2.32	2.32
STEEL Co.	4.14	4.06	3.86	5.06	5.56	13.55	10.08	6.98	6.37	7.47



Graph 5 - Average of Financial Leverage by year

Table 6 - Average of Financial Leverage by companies

Average of Financial Leverage		
CEMENT	Ambuja Cements Limited	1.45
	JK Lakshmi Cement Ltd	2.85
	Birla Corporation Limited	2.00
	UltraTech Cement Limited	1.96
	ACC Limited	1.63
STEEL	Steel Authority of India Limited	2.32
	Tata Steel Limited	4.22
	JSW Steel Ltd	3.63
	Jindal Steel and Power Limited	3.00
	VISA Steel Limited	20.39



Graph 6 - Average of Financial Leverage by companies

ANALYSIS

Financial leverage indicates how much a business is dependent on the debt that it has issued. Financial Leverage primarily tells us how the company is using debt as a part of its financing strategy and its dependency on borrowings.

The financial leverage ratios measure the overall debt load of a company and compare it with the assets or equity. This shows how much of the company assets belong to the shareholders rather than creditors. From the financial leverage analysis tables it can be concluded that from selected cement companies JK Lakshmi Cement Ltd stood number one position while Ambuja Cements Limited stood at last position which indicates that JK Lakshmi Cement Ltd is less dependent on the debt that it has issued compare to all selected cement companies. From the selected steel companies, VISA Steel Limited number one position where as Steel Authority of India Limited stood at last position which indicates VISA Steel Limited is less dependent on the debt that it has issued compare to all selected steel companies. Cement companies are less dependent on the debt that it has issued than steel companies taken under study.

Anova: Single Factor

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
Ambuja Cements Limited	10	14.5	1.45	0.017155556
JK Lakshmi Cement Ltd	10	28.45	2.845	0.316561111
Birla Corporation Limited	10	19.99	1.999	0.177832222
UltraTech Cement Limited	10	19.57	1.957	0.018623333
ACC Limited	10	16.29	1.629	0.008721111

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	11.53136	4	2.88284	26.7477794	2.15E-11	2.578739
Within Groups	4.85004	45	0.107778667			
Total	16.3814	49				

INTERPRETATION

H0 = There is no significant relation in Financial Leverage between the selected Cement companies
H1 = There is significant relation in Financial Leverage between the selected Cement companies

From above table for 4 and 45 degree of freedom.
Fcal is 26.74 and Ftab is 2.57.

Thus, Fcal>Ftab and p-value is less than specified α of 0.05.

So, null hypothesis is rejected it is concluded that there is significant relation in Financial Leverage between the selected Cement companies

Anova: Single Factor

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
Steel Authority of India Limited	10	23.18	2.318	0.164328889
Tata Steel Limited	10	42.21	4.221	0.432632222
JSW Steel Ltd	10	36.3	3.63	0.210088889
Jindal Steel and Power Limited	10	30.02	3.002	0.313573333
VISA Steel Limited	10	203.94	20.394	221.1599822

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	2359.7226	4	589.93065	13.26995328	3.21E-07	2.578739
Within Groups	2000.52545	45	44.45612111			
Total	4360.24805	49				

INTERPRETATION

H0 = There is no significant relation in Financial Leverage between the selected Steel companies
H1 = There is significant relation in Financial Leverage between the selected Steel companies
From above table for 4 and 45 degree of freedom.
Fcal is 13.26 and Ftab is 2.57.

Thus, Fcal>Ftab and p-value is less than specified α of 0.05.

So, null hypothesis is rejected it is concluded that there is significant relation in Financial Leverage between the selected Steel companies

Anova: Single Factor

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
CEMENT Co.	10	19.76	1.976	0.03830044
STEEL Co.	10	67.13	6.713	9.40115933

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	112.195845	1	112.195845	23.7716665	0.00012	4.41387
Within Groups	84.955138	18	4.71972989			
Total	197.150983	19				

INTERPRETATION

H0 = There is no significant relation in Financial Leverage between the selected Cement and Steel companies
H1 = There is significant relation in Financial Leverage between the selected Cement and Steel companies
From above table for 1 and 18 degree of freedom.
Fcal is 23.77 and Ftab is 4.41.
Thus, Fcal>Ftab and p-value is less than specified α of 0.05.
So, null hypothesis is rejected it is concluded that there is significant relation in Financial Leverage between the selected Cement and Steel companies

FINDINGS AND CONCLUSION

The financial leverage ratios measure the overall debt load of a company and compare it with the assets or equity. This shows how much of the company assets belong to the shareholders rather than creditors. From the financial leverage analysis tables it can be concluded that from selected cement companies JK Lakshmi Cement Ltd stood number one position while Ambuja Cements Limited stood at last position which indicates that JK Lakshmi Cement Ltd is less dependent on the debt that it has issued compare to all selected cement companies. From the selected steel companies, VISA Steel Limited number one position where as Steel Authority of India Limited stood at last position which indicates VISA Steel Limited is less dependent on the debt that it has issued compare to all selected steel companies. Cement companies are less dependent on the debt that it has issued than steel companies taken under study.

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