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CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	**BRAND MANAGEMENT OF SCHOOLS** *ANJALI TRIVEDI & DR. SHRADHA M. BANGA*	1
2.	**FACTORS INFLUENCING CONSUMER BUYING BEHAVIOUR OF REFRIGERATOR: AN EMPIRICAL STUDY** *SUNITA RATH, D. P. MISRA & U. C. PATTNAIK*	5
3.	**KNOWLEDGE MANAGEMENT AND INTELLECTUAL PROPERTY MANAGEMENT AS STRATEGIC BUSINESS TOOLS: AN ANALYSIS** *ARUNIMA K. V. & DR. P. PAKEERAPPA*	9
4.	**DENTAL CARE HABITS OF RURAL CONSUMERS IN TELANGANA** *G RAVIKUMAR & P. BHEEMAIAH*	13
5.	**A STUDY ON CUSTOMERS' PERCEPTION TOWARDS MARKETING MIX STRATEGIES ADOPTED BY RURAL RETAILERS IN COIMBATORE DISTRICT** *A. MARTIN JAYARAJ & DR. A. DHARMARAJ*	16
6.	**IMPACT OF CAPITAL STRUCTURE ON COST OF CAPITAL AND VALUE OF FIRM: AN EMPIRICAL STUDY OF CEMENT INDUSTRY IN INDIA** *MOHAN KUMAR M.S., DR. T. ASWATHA NARAYANA & SURAJ M.*	20
7.	**APPLICATION OF MULTIMEDIA DATA MINING TECHNOLOGY IN DIGITAL LIBRARY SYSTEM** *DR. RAKESH KUMAR MISHRA*	24
8.	**FORMAL REALIZATION OF CASE RELATIONSHIPS IN ODIA** *DR. RANJAN KUMAR DAS & DR. GOVINDA CHANDRA PENTHOI*	26
9.	**STUDY OF ACADEMIC ACHIEVEMENT OF ADOLESCENT STUDENTS IN RELATION TO THEIR FAMILY CLIMATE AND AGGRESSION** *GURKIRAN KAUR*	30
10.	**IMPACT OF ONLINE SERVICES & SCHEMES OFFERED BY ING VYSYA BANK MERGED WITH KOTAK MAHINDRA ON CUSTOMERS** *DR. ARCHANA DADHE*	34
11.	**MERGERS AND ACQUISITIONS IN INDIA AND ITS SHORT TERM IMPACT ON SHAREHOLDERS WEALTH** *AMISH BHARATKUMAR SONI*	41
12.	**RELATIONSHIP BETWEEN GOVERNMENT REVENUE GROWTH AND ECONOMIC GROWTH IN ETHIOPIA** *BIRUK BIRHANU, WONDAFERAHU MULUGETA & TEMESGEN YAEKOB*	47
13.	**NON PERFORMING ASSETS MANAGEMENT OF KERALA FINANCIAL CORPORATION (KFC)** *DR. C. SANKAR & VINOD K.RAJU*	55
14.	**INFLUENCE OF TELEVISION ADVERTISING ON PURCHASE DECISION MAKING OF FMCG PRODUCTS** *NANDAKUMAR.P, MANNIL JAMES JANSO & G. GOPIKA*	62
15.	**A STUDY ON CONSUMER'S ATTITUDE TOWARDS EMERGING TREND OF MOBILE ADVERTISING IN KERALA** *AKHILA VENUGOPAL, CHAITHRA M & GIRISH S*	66
16.	**IMPACT OF BRAND AWARENESS ON CONSUMER/BRAND LOYALTY: A STUDY OF PACKAGED MILK BRANDS IN SURAT CITY, GUJARAT** *DR. REENA CHHAJED*	70
17.	**FACTORS AFFECTING EMPLOYEE RETENTION: A CASE STUDY OF SOFTWARE COMPANIES IN BANGALORE CITY** *K. PAVAN & DR. T. L. NARASIMHA REDDY*	76
18.	**CORPORATE SOCIAL RESPONSIBILITY: ITS IMPACT ON THE DEPOSIT MONEY BANKS IN NIGERIA – A CASE STUDY OF GUARANTY TRUST BANK NIGERIA** *IBRAHIM MOHAMMED GADDAFI*	82
19.	**CORPORATE REPORTING THROUGH XBRL** *BHAVNA DABHI*	86
20.	**INTELLECTUAL PROPERTY AND MORAL RIGHTS** *ARPITA NARAYAN*	89
	REQUEST FOR FEEDBACK & DISCLAIMER	93

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- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

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IMPACT OF CAPITAL STRUCTURE ON COST OF CAPITAL AND VALUE OF FIRM: AN EMPIRICAL STUDY OF CEMENT INDUSTRY IN INDIA

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ABSTRACT

Capital structure is an important factor to determine the cost of capital & value of the firm. The present study examines the impact of capital structure on cost of capital & value of the firm in selected cement companies of India. The study is based on secondary data collected from the annual reports of the companies & examines the impact through statistical tools like mean, standard deviation, coefficient of variation and correlation. The study concluded that there is a positive correlation in Ultratech Cement & Negative correlation in Shree cement & Ramco cement between capital structure, cost of capital & Value of the firm. It indicated that there is a significant relation between capital structure, cost of capital & value of the firm and also justified that an optimal capital structure is very important to minimize cost of capital & maximize shareholder's wealth.

KEYWORDS
cost of capital, value of firm, capital structure.

ABBREVIATION
CV = Coefficient of Variation
SD = Standard Deviation
r = Correlation
D/E = Debt equity Ratio

INTRODUCTION
Capital structure, cost of capital and value of the firm are inter-related concepts in financial management. Capital structure is the mix of debt, preference share capital, equity share capital etc. It affects the cost of capital and value of the firm. Cost of capital depends upon the conditions prevailing in the capital market. The overall cost of capital depends upon the cost of each component of capital and proportion of each component of capital in the financing mix. The ultimate objective of business is to maximize the value of firm and thereby maximize the wealth of shareholders. Value of the firm depends upon earnings of the firm which in turn depends upon the investment decisions of firm.

There is a difference of opinion with regard to the relationship between capital structure, cost of capital and value of the firm. According to traditional approach, the value of firm is maximized up to a certain level of debt, but beyond the safety level of debt; use of additional debt has negative effect on the value of firm. Net income approach states that the use of debt should be maximized as it has low cost of capital which in turn maximizes the value of shares. While net operating income approach states that capital structure has no effect on cost of capital and value of firm. M.M Model also states that capital structure has no relation with cost of capital and value of firm, if there are no corporate taxes. But later, it viewed that value of levered firm will be higher than the value of unlevered firm, considering taxes. The study is an attempt to examine the relation among capital structure, cost of capital and value of firm.

India's cement industry is playing an important role of its economy, providing employment to more than a million people, directly or indirectly. Ever since it was deregulated in 1982, the Indian cement industry has attracted huge investments, from both Indian and foreign investors, making it the second largest in the world. The industry is currently in a turnaround phase, trying to achieve global standards in production, safety, and energy-efficiency.

The cement market in India is expected to grow at a compound annual growth rate (CAGR) of 8.96 percent during the period 2014-2019.In India, the housing sector is the biggest demand driver of cement, accounting for about 67 per cent of the total consumption. The other major consumers of cement include infra-structure at 13 per cent, commercial construction at 11 per cent and industrial construction at nine per cent. To meet the rise in demand, cement companies are expected to add 56 million tonnes (MT) capacity over the next three years. The cement capacity in India may register a growth of eight per cent by next year end to 395 MT from the current level of 366 MT. It may increase further to 421 MT by the end of 2017. The country's per capita consumption stands at around 190 kg. According to data released by the Department of Industrial Policy and Promotion (DIPP), cement and gypsum products attracted foreign direct investment (FDI) worth US$ 3,084.89 million between April 2000 and December 2014. The production capacity is projected to reach 550 MT by FY 2020

REVIEW OF LITERATURE
Modigliani and Miller (1958,1963), in their study showed that under the assumptions of perfect capital markets, equivalent risk class, no taxes, 100 per cent dividend-payout ratio and constant cost of debt, the value of a firm is independent of its capital structure. When corporate taxes are taken into account, the value

of a firm increases linearly with debt-equity (D/E) ratio because of interest payments being tax exempted. M-M'S work has been at the centre stage of the financial research till date. Their models have been criticized, supported, and extended over the last 45 years.
David Durand (1963) criticized the model on the ground that the assumptions used by M-M are unrealistic. Solomon (1963) argued that the cost of debt does not always remain constant. When the leverage level exceeds the accepted level, the probability of default in interest payments increases thus raising the cost of debt. Stiglitz (1969, 1974) proved the validity of the M-M model under relaxed assumptions whereas Smith (1972), Krause and Litzenberger (1973), Baron (1974, 1975), and Scott (1976, 1977), supported the M-M model, but only under the conditions of risk free debt and costless bankruptcy. When bankruptcy has positive costs, there exists an optimal capital structure which is a trade-off between tax advantage of debt and bankruptcy costs.
The use of debt in the capital structure of the firm leads to agency costs. Agency costs arise as a result of the relationships between shareholders and managers and those between debt-holders and shareholders. The relationships can be characterized as principal-agent relationships stated by Jensen and Meckling (1976)
Anup Chowdhury, Suman Paul Chowdhury (2010) in their study stated the impact of capital structure on the value of firm in the context of Bangladesh economy or industrial sector. The study resulting inferences were that maximizing the wealth of shareholders requires a perfect combination of debt and equity, whereas cost of capital has a negative correlation in this decision and it has to be as minimum as possible. This is also seen that by changing the capital structure composition a firm can increase its value in the market. Nonetheless, this could be a significant policy implication for finance managers, because they can utilize debt to form optimal capital structure to maximize the wealth of shareholders.
Anju Bala & Poonam Gautam (2014) in their study investigate the impact of debts on the capital structure patterns of the selected companies listed with the Bombay Stock Exchange in India and to test the extent of variations among industries as also among individual's, firms and companies within the same industry. The resulting inferences were that the capital structures among sampled industries investigated were significantly different.
Ranju Bhatia & Mukesh Trehan (2015) in their study examined the effect of debt equity ratio on the cost of capital and value of firm by using tools like Mean, Standard deviation, coefficient of variation and correlation. The study concluded that considering the sample units, no significant relation was found between debt equity ratio and cost of equity and the sample units does not provide empirical evidence regarding positive relationship between debt equity ratio and firm value.

STATEMENT OF PROBLEM

Capital structure is the important aspect in all industries in the process of decision making regarding source of finance. Cement industry is very large industry & required large quantity of finance for their day to day activities. Only when a correct decision is taken regarding debt equity combination in the company, it will decide the cost of capital and value of firm. For the above reasons it is important to understand & analyse the impact of capital structure on cost of capital & value of firm in cement industry.

OBJECTIVES OF THE STUDY

1. To study the composition of capital structure of selected cement companies
2. To examine the effect of debt equity ratio on the cost of capital and value of the firm
3. To study the relationship between capital structure, cost of capital and value of the firm.

HYPOTHESES OF THE STUDY

H_0: There is no significant relationship between capital structure, cost of capital and value of the firm.
H_1: There is a significant relationship between capital structure, cost of capital and value of the firm.

VARIOUS CONCEPTS OF COST OF CAPITAL

Cost of capital is the minimum required rate of return on investment or the price paid by the firm for procuring funds from investors by issuing specific type of security. Cost of capital acts as the benchmark for investment as well as financial decision of firm. For measuring overall cost of capital, cost of each component of capital is combined together also considering the weight allocated to it. So, weighted average cost of capital is computed.

COST OF DEBT

Debt may be issued at par, at premium or at discount; it may be perpetual or redeemable. The apparent cost of debt is the contractual rate of interest payable on debt. But as interest on debt is deductible for computation of tax, so this cost is adjusted for tax.
Debt of capital may be calculated with using following formula
$K_d = I / NP (1-T)$
K_d = Cost of Debt Capital
I = Interest
NP = Net Proceeds
T = Tax

COST OF EQUITY SHARE CAPITAL

The cost of equity is the minimum rate of return that a firm must earn on the equity financed portion of an investment project in order to leave unchanged the market price of the shares. The equity shareholders provide funds in expectation of dividend or capital gains. There are various approaches for computing cost of equity shares viz. Dividend to Market Price Ratio Approach, Earnings to Market Price Ratio Approach, Dividend to Market Price Ratio plus Growth Approach, Earning to Market Price Ratio plus Growth Approach. These approaches can be used if business earns profit.
Cost of equity is calculated under divided price approach as follows
$K_e = D / NP$
Ke = cost of equity capital
D = Expected dividend
NP = Net Proceeds

OVERALL COST OF CAPITAL

After determining cost of each specific component of capital, the overall cost of capital is ascertained on the basis of weighted average method. It lies between least and most expensive source of capital. The formula used for computing overall cost of capital is given below:
$K_o = (WKd + WKP + WKe)$ / Total of Weights
K_o = Overall cost of capital
W = Weight (On the Basis of Book-Value)
KP = Cost of Preference Share Capital
K_e = Cost of Equity Share Capital
K_d = Cost of Debt

VALUE OF FIRM

In this study, value of firm is measured with the help of following formula:
Enterprise Value (E.V.) = Market Capitalization + Debt - Financial Assets

RESEARCH METHODOLOGY

The study is based on secondary data during the period from 2010-11 to 2014-15 & a sample size of three cement companies in India on the bases of market capitalisation as on 10th July 2015 & listed in BSE and availability of required data for study period. The data was collected from the published sources like books, annual reports of companies & website of money control.com. The collected data will be analyzed by using Average, Standard deviation, coefficient of variance & correlation in order to verify the relationship between Capital structure, cost of capital & Value of firm.

TABLE 1: PROFILE OF SAMPLE COMPANIES

Rank	Name of the Company	Market Capitalisation (Rs. In crores)	Corporate office	Year of establishment
1	Ultratech Cement	85,363.84	Mumbai	1983
2	Shree Cement	38,460.30	Ajmer	1979
3	Ramco Cement	8,047.00	Chennai	1950

(Source: http://business.mapsofindia.com/cement/top-10-cement-companies.html)

RESULTS & DISCUSSIONS

TABLE 2: CAPITAL STRUCTURE, COST OF CAPITAL AND VALUE OF FIRM IN ULTRATECH CEMENT

Year	D/E	Trend	Kd	Trend	Ke	Trend	Ko	Trend	Value of firm	Trend
2010-11	0.25	1.00	0.05	1.00	0.60	1.00	0.49	1.00	33560.93	1.00
2011-12	0.30	1.20	0.04	0.78	0.80	1.33	0.62	1.27	44920.92	1.34
2012-13	0.29	1.16	0.03	0.64	0.90	1.50	0.71	1.44	55536.84	1.65
2013-14	0.28	1.12	0.06	1.03	0.90	1.50	0.71	1.46	64623.67	1.93
2014-15	0.35	1.40	0.10	1.84	0.90	1.50	0.69	1.41	85187.89	2.54
Average	0.29		0.06		0.82		0.65		56766.05	
SD	0.04		0.02		0.13		0.09		19684.00	
CV	12.40		43.90		15.90		14.49		34.68	
R			0.69		0.66		0.59		0.85	

(Source: calculated value from annual reports of the company)

The table 2 reveals that there is positive trend & relationship among capital structure (debt equity ratio), cost of debt, cost of equity, and overall cost of capital and value of firm in Ultratech cement during the year 2010-11 to 2014-15. The average debt equity ratio is 0.29. It shows that the ratio is below the standard norms of 0.5. The average cost of debt is 0.06, average cost of equity is 0.82 and average overall cost of capital is 0.65. It indicates that debt is a very cheap source of finance for Ultratech cement. The cost of debt varies more during the study period and use of debt is helping in reducing overall cost of capital. A positive correlation was found between debt equity ratio and cost of debt, cost of equity and value of firm. It implies that increased use of debt helps in enhancing the value of firm and a positive relationship between capital structure, cost of capital & value of firm in Ultratech cement.

TABLE 3: CAPITAL STRUCTURE, COST OF CAPITAL AND VALUE OF FIRM IN SHREE CEMENT

Year	D/E	Trend	Kd	Trend	Ke	Trend	Ko	Trend	Value of firm	Trend
2010-11	0.85	1.00	0.10	1.00	1.40	1.00	0.80	1.00	8425.16	1.00
2011-12	0.35	0.41	0.23	2.39	2.00	1.43	1.54	1.92	11010.89	1.31
2012-13	0.25	0.29	0.35	3.66	2.00	1.43	1.67	2.09	16870.97	2.00
2013-14	0.23	0.27	0.22	2.34	2.20	1.57	1.83	2.29	26165.63	3.11
2014-15	0.12	0.14	0.23	2.39	2.40	1.71	2.17	2.71	39763.24	4.72
Average	0.36		0.23		2.00		1.60		20447.18	
SD	0.29		0.09		0.37		0.51		12768.84	
CV	79.40		39.94		18.71		31.56		62.45	
r			-0.76		-0.97		-0.98		-0.74	

(Source: calculated value from annual reports of the company)

The table 3 reveals that the negative trend of Debt equity ratio and positive trend of cost of debt, cost of equity, overall cost capital and value of firm during the year 2010-11 to 2014-15. The average debt equity ratio is 0.36, average cost of debt is 2.00 and average overall cost of capital is 1.60. It indicates that debt finance is cheap a source compared to equity capital. The debt equity ratio varies more during the study period. There is negative correlation between debt equity ratio and cost of debt, cost of equity, overall cost of capital and value of the firm. It implies that decreased use of debt helps in enhancing the value of firm and a negative relationship between capital structure, cost of capital & value of firm in Shree cements.

TABLE 4: CAPITAL STRUCTURE, COST OF CAPITAL AND VALUE OF FIRM IN RAMCO CEMENT

Year	D/E	Trend	Kd	Trend	Ke	Trend	Ko	Trend	Value of firm	Trend
2010-11	1.14	1.00	0.06	1.00	1.25	1.00	0.62	1.00	4362.77	1.00
2011-12	1.03	0.90	0.08	1.38	2.50	2.00	1.28	2.07	5716.18	1.31
2012-13	0.84	0.74	0.10	1.67	3.00	2.40	1.68	2.72	7924.78	1.82
2013-14	0.90	0.79	0.10	1.60	1.00	0.80	0.57	0.93	7313.98	1.68
2014-15	0.86	0.75	0.09	1.46	1.50	1.20	0.85	1.37	9449.54	2.17
Average	0.95		0.09		1.85		1.00		6953.45	
SD	0.13		0.02		0.86		0.47		1971.45	
CV	13.37		18.46		46.42		47.19		28.35	
r			-0.92		-0.26		-0.38		-0.93	

(Source: calculated value from annual reports of the company)

The table 4 reveals the negative trend of Debt equity ratio and positive trend of cost of debt, cost of equity, overall cost of capital and value of firm during the year 2010-11 to 2014-15. The average debt equity ratio is 0.95. It was more than the normal standard norm of 0.5. Average cost of debt is 0.09, average cost of equity is 1.85 and average overall cost of capital is 1.00. It indicates that the debt finance is a cheap source as compared to equity during the study period. Value of firm has increased during the study period. It indicates that debt capital must be used in the capital structure upto some level after that using of debt may increase the cost of debt. The overall cost of capital varies more during the study period. There is negative correlation between the debt equity ratio, cost of debt, Cost of equity, overall cost of capital and value of the firm. It implies that decreased use of debt helps in enhancing the value of firm and there is a negative relationship between capital structure, cost of capital & value of firm in Ramco cement.

FINDINGS

- The average debt equity ratio of Ultratech cement is the least i.e. 0.29, compared to other two companies & has a higher value of firm i.e. 56766.05 crores. This shows that lower debt leads to an increase in the value of firm & decrease in overall cost of capital.
- The coefficient of variation of Ultratech cement being 12.40% is the least compared to other two companies, indicating that Ultratech cement is more consistent in its performance.
- The average overall cost of capital of Ultratech cement is 0.65 in comparison with Shree cement & Ramco cement i.e. 1.60 & 1.00 respectively. This shows that a proper use of debt in the capital structure can lead to decline in overall cost of capital as seen in case of Ultratech cement.
- There is positive correlation between debt equity ratio with cost of debt, cost of equity & overall cost of capital in case of Ultratech cement. Where as in case of Shree cement & Ramco cement there is negative correlation between debt equity ratio & cost of capital.
- The impact of debt equity ratio on the overall cost of capital and value of firm is very significant in relation to the sample companies.

RECOMMENDATIONS

There is an impact of capital structure on cost of capital and value of firm. The correlation has both negative & positive relationship between debt equity ratios, cost of capital and value of firm. It is recommended that firm must maintain optimal level of financial mix to minimize the cost of capital.

CONCLUSION

Capital structure is the mix of debt, preference share capital, equity share capital etc. It affects the cost of capital and value of the firm. The ultimate objective of business is to maximize the value of firm and thereby maximize the wealth of shareholders. Value of firm depends upon earnings of the firm which in turn depend upon the investment decisions of firm. The present study examines the capital structure of selected cement companies in India & its impact on cost of capital & value of the firm. The study reveals that there is significant impact of capital structure on cost of capital and value of the firm of sample companies during the study period.

SCOPE FOR FURTHER RESEARCH

The present study is restricted to cement industry; we can do same analysis & discussion in other industries to find out the impact of capital structure on cost of capital & value of firm.

REFERENCES

1. Anju Bala & Poonam Gautam (2014) Impact of debts on the capital structure patterns: a study of Companies listed on the Bombay stock exchange, International Journal of Research in Business Management Vol. 2, Issue 5, pp 105-112
2. Anup Chowdhury, Suman Paul Chowdhury (2010) Impact of capital structure on firm's value: Evidence from Bangladesh, Business and Economic Horizons, Volume 3, Issue 3, pp 111-122
3. Baron, D P (1974) Default Risk, Home-made Leverage and M-M Theorem, American Economic Review, 64, pp 176-82
4. Baron, D P (1975) Firm Valuation, Corporate Taxes and Default Risk, Journal of Finance, 30, pp 1251-64.
5. Chandra P (2011), Financial Management: Theory and Practice, Tata McGraw Hill publishing company Ltd New Delhi.
6. Durand, David (1963). The Cost of Capital in an Imperfect Market: A Reply to M-M, American Economic Review, 53
7. Jensen, Michael C. and William H. Meckling (1976) Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics 3: 305-360.
8. Kraus, A and Litzenberger, R H (1973) A State Preference Model of Optimal Financial Leverage, Journal of Finance, 28, pp 911-22
9. Modigliani, F and Miller M (1963) Corporate income taxes and the cost of capital: A correction, American Economic Review, Vol.53, pp.433-43.
10. Modigliani, F and Miller, M H (1958) The Cost of Capital, Corporation Finance and the Theory of 36 Investment, American Economic Review, 48, pp 261-97
11. Pandy, I M (2010), Elements of financial management, Vikas Publishing House, New Delhi.
12. Ranju Bhatia & Mukesh Trehan (2015), impact of capital structure on cost of capital and value of firm: an empirical study of power industry in India, South Asian Academic Research Journal, Vol.5, Issue 4, April 2015, pp 288-298
13. Scott Jr., J H (1976) A Theory of Optimal Capital Structure, Bell Journal of Economics, spring, pp 33-54
14. Scott Jr., J H (1977) Bankruptcy, Secured Debt and Optimal Capital Structure, Journal of Finance, 32, pp 261-73.
15. Smith, V L (1972) Default Risk, Scale and Home-made Leverage Theorem, American Economic Review, 62
16. Solomon, Ezra (1963) Leverage and the Cost of Capital, Journal of Finance, 18, pp 273-79
17. Stiglitz JE (1969) A Re-examination of M-M Theorem, American Economic Review, 59, pp 784-93
18. Stiglitz, J E (1974) On the Irrelevance of Corporate Financial Policy, American Economic Review, 62, pp 851-66

WEBSITES

19. http://business.mapsofindia.com/cement/top-10-cement-companies.html
20. www.money control.com

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