Research Paper

Commerce



Capital Structure Patterns: A Case Study of Housing Finance Company

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ABSTRACT

This paper is analysis the explanatory power of some of the theories that have been proposed in the literature to explain variations in capital structures across firms. In particular, this study investigates capital structure determinants of Housing Finance firms based on from 2005 to 2014 comprising 4 companies. The study is to analyze the effect of Debt-Equity ratios on other ratio. An analysis of determinants of leverage based on total debt ratios may mask significant differences in the

determinants of long and short-term forms of debt.

The results indicate that most of the determinants of capital structure suggested by capital structure theories appear to be relevant for firms. But we also find significant differences in the determinants of long and short-term forms of debt. Due to data limitations, it was not possible decompose short-term debt and long-term debt into its elements, but the results suggest that future analysis of capital choice decisions should be based on a more detailed level.

KEYWORDS: Debt-equity, Size, Return on Net-worth, Interest Coverage

Introduction:-

How do firms choose their capital structures? In his answer to this question, Prof. Stewart C. Myers, then President of American Finance Association in 1984 said that "we don't know". Despite decades of intensive research, and hundreds of papers after Modigliani and Millers' seminal work, surprisingly there is lack of consensus even today among the finance experts on this basic issue of corporate finance. A practical question therefore is: What determines the capital structure? This paper undertakes study of firm level data of 4 major companies listed in BSE, taken from aviation sectors and attempts to identify main determinants of capital structure for the period 2005-06 to 2013-14 in the light of the above mentioned theories. My purpose of this exercise is to verify whether any particular theory can characterize Indian corporate behavior in determining capital structure.

Review of Literature:-

In the light of the vast literature on capital structure issues, we do not try to provide a comprehensive review, and we do not discuss theory in detail. Rather, as a starting ground, we will give a brief outline of the major theoretical ideas and the corresponding empirical implications, and present some empirical studies on capital structure issues. The focus of our discussion is on (subjectively) selected recent empirical studies. Sound financing decisions of a firm basically should lead to an optimal capital structure. Capital structure represents the proportion in which various long - term capital components are employed. Over the years, these decisions have been recognized as the most important decisions that a firm has to take. This is because of the fact that capital structure affects the cost of capital, net profit, earning per share, and dividend payout ratio and liquidity position of the firm.

Franco Modigliani and Merton Miller (hereafter called MM) were the first to present a formal model on valuation of capital structure. In their seminal papers (1958,1963), they 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. MM'S work has been at the center stage of the financial research till date. Their models have been criticized, supported, and extended over the last 50 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.

Research Methodology:-Objective of the Study:-

The proposed research is intended to examine the trend and pattern of financing the capital structure of Indian companies. The central issue we will address is to examine empirically the existence of inter firm and inter industry differences in the capital structure of Indian

firms and identify the possible sources of such variation in capital structure in order to find out the factors that determine the financing pattern of capital structure of Indian companies, particularly in the private sector.

Source of Data:-

For our study purpose, only secondary data is used which is sourced from the annual reports of the selected companies and websites www.moneycontrol.com and www.bseindia.com. The information relating to nature of industry, size, age, state and region, company background, value of total assets and annual financial statements of sample companies for the period of - 2005-06 to 2013-2014 have been obtained from the same.

Determinants of capital structure:-Interest Coverage Ratio:-

A ratio used to determine how easily a company can pay interest on outstanding debt. The interest coverage ratio is calculated by dividing a company's earnings before interest and taxes (EBIT) of one period by the company's interest expenses of the same period.

Debt-Equity:-

In financial terms, debt is a good example of the proverbial twoedged sword. Astute use of leverage (debt) increases the amount of financial resources available to a company for growth and expansion. The assumption is that management can earn more on borrowed funds than it pays in interest expense and fees on these funds.

Return on Net-worth:-

Return on net worth measures how much a company earns within a specific period in relation to the amount that is invested in its common stock. It is calculated by dividing the company's net income before common stock dividends are paid by the company's net worth which is the shareholder's equity.

Return on capital employed:-

It is a ratio that indicates the efficiency and profitability of a company's capital investments. It should always be higher than the rate at which the company borrows. Otherwise any increase in borrowing will reduce shareholder's earnings.

Size:-

Many studies suggest that there is a positive relationship between firm size and leverage. Marsh indicates that large firms more often choose long-term debt, while small firms choose short term debt. The cost of issuing debt and equity is negatively related to firm size. In addition, larger firms are often diversified and have more stable cash flows, and so the probability of bankruptcy for larger firms is less, relative to smaller firms. This suggests that size could be positively related with leverage.

Data analysis:-

The data has been analyzed using various statistical tools like correlation, regression. The figures for the purpose of the analysis have been collected from various available secondary sources.

Interest Coverage

Year	HDFC	LIC	DHFL	Gruh Finance
2005	1.65	1.31	1.33	1.46
2006	1.63	1.3	1.32	1.46
2007	1.54	1.31	1.27	1.47
2008	1.52	1.35	1.3	1.53
2009	1.39	1.36	1.26	1.36
2010	1.56	1.38	1.29	1.54
2011	1.64	1.35	1.32	1.64
2012	1.51	1.25	1.22	1.53
2013	1.47	1.23	1.2	1.49
2014	1.46	1.25	1.19	1.45

ANOVA							
Source of Variation	SS	df	MS	F	P-value	F crit	
Between Groups	0.53	3	0.18	38.83	2.24	2.87	
Within Groups	0.16	36	0.0045				
Total	0.69	39					

The calculated value is 38.89 and table value is 2.87 which is lower than the calculated value. Hence the Null hypothesis is rejected and alternative hypothesis is accepted.

Debt Equity

Year	HDFC	LIC	DHFL	Gruh Finance
2005	9.44	7.23	8.26	10.98
2006	10.46	7.34	9.13	12.43
2007	10.3	8.05	9.57	7.95
2008	5.79	9.08	9.08	9.32
2009	6.38	9.88	12.93	10.17
2010	6.35	10.26	10.26	8.78
2011	4.78	10.83	9.59	9.33
2012	5.05	8.42	8.34	9.93
2013	4.35	9.06	8.48	7.69
2014	4.03	9.49	9.48	9.1

ANOVA						
Source of Variation	ss	df	MS	F	P-value	F crit
Between Groups	55.10	3	18.37	6.47	0.0012	2.87
Within Groups	102.17	36	2.84			
Total	157.27	39				

The calculated value is 6.47 and table value is 2.87 which is lower than the calculated value. Hence the Null hypothesis is rejected and alternative hypothesis is accepted.

Return o	on Net-wor	th		
Year	HDFC	LIC	DHFL	Gruh Finance
2005	26.69	12.03	14.3	22.66
2006	28.14	15.5	15.41	24.95
2007	28.29	18.08	13.25	18.03
2008	20.9	21.13	18.67	22.25
2009	17.37	23.79	20.17	22.76
2010	18.59	19.54	17.3	26.05
2011	20.41	23.37	17.12	28.78
2012	21.67	16.08	15.07	31.21
2013	19.39	15.78	13.95	29.71
2014	19.46	17.48	14.79	29.14

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	532.33	3	177.44	13.43	4.88	2.87
Within Groups	475.53	36	13.21			
Total	1007.87	39				

The calculated value is 13.43 and table value is 2.87 which is lower than the calculated value. Hence the Null hypothesis is rejected and alternative hypothesis is accepted.

Return on Capital Employed

Year	HDFC	LIC	DHFL	Gruh Finance
2005	7.96	7.23	8.03	8.05
2006	7.93	7.34	7.72	7.48
2007	8.99	8.05	8.2	8.45
2008	9.72	9.08	10.71	9.18
2009	11	9.88	9.7	10.93
2010	9.83	8.7	8.83	10.57
2011	12.42	8.43	7.76	9.9
2012	14.62	10.72	11.57	11.21
2013	15.29	11.19	12.15	14.09
2014	16.7	11.39	12.05	12.84

ANOVA							
Source of Variation	SS	df	MS	F	P-value	F crit	
Between Groups	28.23	3	9.41	1.88	0.15	2.87	
Within Groups	180.26	36	5.01				
Total	208.49	39					

The calculated value is 1.88 and table value is 2.87 which is higher than the calculated value. Hence the Null hypothesis is accepted and alternative hypothesis is rejected.

Size				
Year	HDFC	LIC	DHFL	Gruh Finance
2005	3.53	3.01	2.21	1.92
2006	3.67	3.09	2.35	2.01
2007	3.77	3.19	2.52	2.16
2008	3.91	3.32	2.71	2.3
2009	4.04	3.46	2.83	2.46
2010	4.05	3.54	2.99	2.49
2011	4.11	3.66	3.16	2.55
2012	4.24	3.79	3.39	2.71
2013	4.32	3.88	3.62	2.81
2014	4.38	3.96	3.69	2.93

ANOVA							
Source of Variation	SS	df	MS	F	P-value	F crit	
Between Groups	13.77	3	4.59	32.18	2.73	2.87	
Within Groups	5.13	36	0.14				
Total	18.90	39					

The calculated value is 32.18 and table value is 2.87 which is lower than the calculated value. Hence the Null hypothesis is rejected and alternative hypothesis is accepted.

Findings & Suggestion:-

- 1.) The Housing Finance industry nowadays is one of the growing sectors in our economy.
- 2.) The selected companies are performing well in terms of selected variables except some case.
- 3.) HDFC is performing well in selected variable. It is positive sign for the company.
- 4.) The order of the finance of company should be internal fund, debt and last one owner's fund.
- The results of interest coverage ratio shows that the selected 5.) companies are performing result most of nearer to each other. There is no vast difference or fluctuations. It is good sign.

Conclusion:-

The study indicates that service sector companies relies more on the equity and less on the debt, and vice versa in case of manufacturing companies. To sum up, Indian companies prioritize their sources of financing (from internal financing to equity) according to the law of least effort, or of least resistance, preferring to raise equity as a financing means "of last resort". Hence internal funds are used first, and when that is depleted debt is issued, and when it is not sensible to issue any more debt, equity is issued. Equity capital as a source of fund is not preferred across the board. This gives a redeeming signal about the Indian corporate behavior which is found out to show more dependence on their internally generated funds than on external sources of finance.



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