Management

# **ORIGINAL RESEARCH PAPER**

## **CAPITAL STRUCTURE DETERMINANTS OF SELECTED** FINANCE SECTOR FIRMS

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

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ACT	in capital structures acro on from 2013 to 2017 co	explanatory power of some of the theories that have been proposed in the literature to explain variations iss firms. In particular, this study investigates capital structure determinants of finance companies based omprising 5 companies. The study is to analyze the effect of Debt-Equity ratios on other ratio. An analysis age based on total debt ratios may mask significant differences in the determinants of long and short-

#### term forms of debt.

ABSTR 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.

## **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 5 major companies listed in BSE, taken from finace sectors and attempts to identify main determinants of capital structure for the period 2012-13 to 2016-17 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 MM are unrealistic. Solomon (1963) argued that the cost of debt does not always remain constant.

### Research Methodology:-**Objective of the Study:-**

- To analyse the financial risk factor of the selected company.
- To find out the determinants of capital structure.
- To find out the earning capacity of the selected company.
- To suggest the ways and means of capital structure of the company.

#### 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 2012-13 to 2016-2017 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.

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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.

#### Table-1: Return on capital employed

	2013	2014	2015	2016	2017
Reliance Capital	10.56	9.93	11.12	12.32	9.51
IDFC	13.37	12.25	11.07	12.35	8.65
Power Finance Corporation	10.36	12.15	11.85	11.93	10.27
Shree Ram Transport	16.31	17.21	14.03	15.64	14.25
Motilal Oswal Financial Service	12.19	10.07	10.99	10.45	13.78

#### Anova Test

Source of	SS	df	MS	F	P-value	F crit
Variation						
Between	5.933016	4	1.483254	0.280875	0.886878	2.866081
Groups						
Within	105.6168	20	5.28084			
Groups						
Total	111.5498	24				

The calculated value is 0.45 and table value is 2.12 which is higher than the calculated value. Hence the Null hypothesis is accepted and alternative hypothesis is rejected. Therefore the difference is insignificant.

#### Table-2: Return on Networh

	2013	2014	2015	2016	2017
Reliance Capital	6.78	6.02	7.51	7.78	7.08
IDFC	13.41	11.98	9.88	-9.25	6.46
Power Finance Corporation	18.36	19.84	18.52	17.16	6.06
Shree Ram Transport					11.16
Motilal Oswal Financial Service	8.95	3.37	11.08	11.77	20.15

## Anova Test

Source of		df	MS	F	P-value	F crit
Variation						
Between	87.53706	4	21.88427	0.468473	0.758187	2.866081
Groups						
Within	934.281	20	46.71405			
Groups						
Total	1021.818	24				

The calculated value is 0.46 and table value is 2.12 which is higher than the calculated value. Hence the Null hypothesis is accepted and alternative hypothesis is rejected. Therefore the difference is insignificant.

#### Table-3:Interest coverage ratio

	2013	2014	2015	2016	2017
Reliance Capital	1.35	1.34	1.47	1.61	1.5
IDFC	1.55	1.51	1.41	1.29	1.27
Power Finance Corporation	1.54	1.58	1.55	1.55	1.31
Shree Ram Transport	1.71	1.47	1.35	1.35	1.37
Motilal Oswal Financial Service	30.93	41.22	7.4	2.29	2

### Anova Test

Source of Variation		df	MS	F	P-value	F crit
Between Groups	267.9397	4	66.98493	0.675134	0.617036	2.866081
Within Groups	1984.345	20	99.21727			
Total	2252.285	24				

The calculated value is 1.12 and table value is 2.12 which is higher than the calculated value. Hence the Null hypothesis is accepted and alternative hypothesis is rejected. Therefore the difference is insignificant.

#### Table-4: Debt – Equity Ratio

	2013	2014	2015	2016	2017
Reliance Capital	1.51	1.72	1.61	1.61	2.16
IDFC	2.97	3.13	3.18	5.01	8.01
Power Finance Corporation	5.78	5.23	5.22	5	4.82
Shree Ram Transport	3.36	3.21	3.86	3.3	3.41
Motilal Oswal Financial Service			0.61	1.65	2.6

#### Anova Test

Source of Variation		df	MS	F	P-value	F crit
Between Groups	4.506072	4	1.126518	0.32388	0.858265	2.927744
Within Groups	62.60762	18	3.478201			
Total	67.11369	22				

The calculated value is 0.09 and table value is 2.12 which is higher than the calculated value. Hence the Null hypothesis is accepted and alternative hypothesis is rejected. Therefore the difference is insignificant.

### Table-5: Size Ratio

	2013	2014	2015	2016	2017
Reliance Capital	3.58	3.5	3.6	3.61	3.29
IDFC	3.89	3.91	3.96	2.35	2.20
Power Finance Corporation	4.23	4.33	4.40	4.44	4.42
Shree Ram Transport	3.82	3.9	3.94	4.01	4.03
Motilal Oswal Financial Service	1.85	1.84	2.11	2.04	2.12

### Anova Test

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.509224	4	0.127306	0.133087	0.968353	2.866081
Within Groups	19.1312	20	0.95656			
Total	19.64042	24				

The calculated value is 0.31 and table value is 2.12 which is higher than the calculated value. Hence the Null hypothesis is accepted and alternative hypothesis is rejected. Therefore the difference is insignificant.

## 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 shows that somewhere or other, the financing pattern of Indian power generation sector companies' is in line with the packing order theory as propounded by Myers and Majluf (1984). 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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