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Capital Structure Patterns of Selected Consumer Electronics 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 consumer electronic firms based on from 2005 to 2014 comprising 5 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. Therefore, this paper studies determinants of total debt ratios as well as determinants of short-term and long-term debt ratios. 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: Capital Structure, Consumer, Debt-Equity, Ratio.

I. 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. In practice, it is observed that finance managers use different combinations of debt and equity. Academicians and practitioners alike have found it difficult to find out how a firm decides its capital structure in the perfect capital markets of the west as well as in the imperfect capital markets, as in India. This has led to an upsurge in research on company finance, particularly aimed at understanding how companies finance their activities and why they finance their activities in these specific ways. A practical question therefore is: What determines the capital structure? There are three major capital structure theories namely Trade off Theory [Kraus, A., Litzenberger, R. (1973), Kim (1978)], Pecking Order Theory [Myers (1984) and Myers and Majluf (1984)], Agency Cost Theory [Jensen and Meckling (1976)]. This paper undertakes study of firm level data of 3 major companies listed in BSE, taken from aviation sectors and attempts to identify main determinants of capital structure for the period 2008-09 to 2012-13 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. The central issue I 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. Efforts will be made to find out the factors that determine the financing pattern of capital structure of Indian companies, particularly in the private sector.

II. 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. These variables coupled with a number of other factors determine the value of a firm. So, capital structure is a very important determinant of the value of a 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. Once the leverage level exceeds the accepted level, the probability of default in interest payments increases by which the cost of debt rises. Stiglitz (1969, 1974) proved the validity of the MM 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.

III.   RESEARCH METHODOLOGY

1.   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.

2.   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 2008-09 to 2012-2013 have been obtained from the same.

IV.   DETERMINANTS OF CAPITAL STRUCTURE

1.   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.

2.   Debt-Equity:

In financial terms, debt is a good example of the proverbial two-edged 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. However, as successful as this formula may seem, it does require that a company maintain a solid record of complying with its various borrowing commitments.

3.   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.

4.   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.

V.   DATA ANALYSIS

The data has been analyzed using various statistical tools like correlation, regression. The data has been also analyzed using different test and statistical tools like SPSS. The figures for the purpose of the analysis have been collected from various available secondary sources like annual reports of the company, journals of the finance, and other periodicals.

Table-1
Interest Coverage Ratio

Year	LG	BPL	Whirlpool	Blue Star	Hitachi
2005	2.47	-40.21	-6.71	17.01	6.62
2006	2.09	-14.12	-3.25	13.77	21.09
2006	2.29	-1.52	0.25	10.64	17.32
2008	1.65	-2.78	3.48	27.73	50.59
2009	1.49	-3.44	7.46	18.49	21.94
2010	2.94	-1.04	153.65	64.92	34.02
2011	4.37	-1.21	95.72	11.56	33.79
2012	4.6	15.77	110.16	-1.24	1.31
2013	2.88	10.18	60.7	2.05	3.87
2014	5.05	32.16	123.52	2.53	1.95

Table-2
Anova

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	19058.6	4	4764.649	4.961939	0.002121	2.578739
Within Groups	43210.77	45	960.2394			
Total	**62269.37**	**49**				

The calculated value is 4.96 and table value is 2.57 which is lower than the calculated value. Hence the Null hypothesis is rejected and alternative hypothesis is accepted. Therefore the difference is significant.

Table-3
Debt-Equity

Year	LG	BPL	Whirlpool	Blue Star	Hitachi
2005	1.55	2.61	5.15	0.25	8.06
2006	1.97	6.65	9.52	0.44	1.96
2007	2.31	4.13	10.45	0.42	0.81
2008	1.65	5.66	5.25	0.14	0.14
2009	1.08	6.95	1.92	0.06	0.48
2010	0.67	6.54	0.76	0.02	0.41
2011	0.6	1.97	0.15	0.73	0.52
2012	0.49	0.94		0.72	0.41
2013	0.48	0.86		0.75	0.77
2014	0.34	2.41		0.81	0.41

Table-4
Anova

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	122.56	4	30.64	6.12	0.0005	2.59
Within Groups	210.22	42	5.00			
Total	**332.79**	**46**				

The calculated value is 6.12 and table value is 2.59 which are lower than the calculated value. Hence the Null hypothesis is rejected and alternative hypothesis is accepted. Therefore the difference is significant.

Table-5
Return on Networth

Year	LG	BPL	Whirlpool	Blue Star	Hitachi
2005	20.04	-20.17	-125.09	26.32	81.28
2006	14.59	-83.52	-19.64	28.26	67.95
2007	17.22	-10.15	-2.82	33.37	46.92
2008	10.38	-56.96	64.82	66.32	50.63
2009	22.77	-19.9	55.39	49.13	20.16
2010	15.64	0.48	36.44	43.01	31.46
2011	23.43	53.12	44.05	27.02	17.05
2012	18.98	29.16	25.67	-18.81	1.9
2013	13.08	-5.2	20.68	10.46	8.42
2014	18.07	-181.22	16.6	14.33	3.35

Table-6
Anova

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	24378.58	4	6094.645	3.537171	0.013598	2.578739
Within Groups	77536.25	45	1723.028			
Total	**101914.80**	**49**				

The calculated value is 3.53 and table value is 2.57 which is lower than the calculated value. Hence the Null hypothesis is rejected and alternate hypothesis is accepted. Therefore the difference is significant.

Table-7
Return on Capital Employed

Year	LG	BPL	Whirlpool	Blue Star	Hitachi
2005	17.64	-16.75	-20.39	29.34	14.04
2006	14.77	-21.28	-10.45	31.63	31.92
2007	11.5	-3.07	0.92	33.58	32.48
2008	12.23	-6.19	11.53	69.82	46.03
2009	12.59	-7.57	24.65	64.09	27.19
2010	22.77	-2.7	60	50.35	24.85
2011	21.29	-2.91	59.37	22.71	17.52
2012	23.4	14.32	39.7	-4.15	4.84
2013	16.96	8.83	29.49	11.81	7.42
2014	21.14	1.84	23.73	13.07	6.89

Table-8
Anova

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	6927.592	4	1731.898	5.40	0.00122	2.58
Within Groups	14424.17	45	320.5371			
Total	**21351.76**	**49**				

The calculated value is 5.40 and table value is 2.58 which are lower than the calculated value. Hence the Null hypothesis is rejected and alternative hypothesis is accepted. Therefore the difference is significant.

VI.   FINDINGS & SUGGESTION

1. The 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. The order of the finance of company should be internal fund, debt and last one owner's fund.
4. The result of the BPL in terms of Return on Networth is poor as compared to others.

VII.   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 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 pharma 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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