Chapter V

Determinants of Capital Structure of Service Sector

CHAPTER V

DETERMINANTS OF CAPITAL STRUCTURE OF SERVICE SECTOR

5.1 INTRODUCTION

Capital structure refers to the way a firm going to choose to finance its assets and investments through some combination of equity, debt, or internal funds. The capital structure of a concern depends upon a large number of factors. It is not possible to rank them because all such factors are of different important and the influence of individual factors of a firm changes over a period of time. This chapter summarises the analysis of selected variables determining the capital structure of select service sector.

5.2 VARIABLES DETERMINING THE CAPITAL STRUCTURE OF SERVICE SECTOR

The variables namely Current Ratio, Interest Coverage ratio, Profitability, Size of the firm, Tax rate, Age of the firm, Return on Equity, Growth, Tangibility, Non-debt Tax Shield, Dividend Payout ratio, Cost of Debt, Cost of Equity, Inflation, GDP and Bank Rate. To analyse the determinants of capital structure, Correlation analysis, multiple regression analysis and step- wise regression analysis has been used. Correlation analysis explains the relationship between capital structure and determinants while multiple regression describes the impact of determinants of capital structure. Step wise regression analysis is applied to find out the prominent variables that account for the variations in capital structure.

5.2.1 CORRELATION ANALYSIS OF HEALTHCARE INDUSTRY

Variables Associated with Capital Structure in Healthcare Industry under Large cap

The table 5.1 gives the details of selected variables associated with capital structure of large cap companies in healthcare industry. The association is analysed using the correlation coefficient and coefficient of determination.

Table 5.1 : Variables Associated with Capital Structure - Healthcare Industry (Large cap)

Variables	r	r^2
Current Ratio	-0.036	0.001
Interest Coverage Ratio	-0.179	0.032
Profitability	-0.124	0.015
Size of the firm	-0.536**	0.288
Tax rate	0.162	0.026
Age of the firm	-0.194	0.038
Return on Equity	-0.042	0.002
Growth	0.070	0.005
Tangibility	0.542**	0.294
Non-debt Tax Shield	0.489**	0.239
Dividend Payout Ratio	-0.149	0.022
Cost of Debt	-0.140	0.020
Cost of Equity	-0.223	0.050
Inflation	-0.297**	0.088
GDP	-0.286*	0.082
Bank Rate	-0.154	0.024

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Out of sixteen variables selected, five variables are found to be significant. Size of the firm, Tangibility, Non-debt tax shield and Inflation are found to be significant at one per cent level. GDP is found to be significant at five per cent level.

Size of the firm

Logarithm of gross tangible assets are considered to analyse the size of the firm. Size of the firm and capital structure are negatively correlated with each other. The negative implication (-0.536) indicates that the decrease in size of the firm would increase the debt level in the capital mix. The coefficient of determination (r^2) shows that size of the firm depicts 28.8 per cent of variations in the capital structure.

Tangibility

The value of correlation coefficient (0.542) shows a positive relationship between tangibility and capital structure. This shows that increase in fixed asset leads to increase in

the debt level of the capital mix. The coefficient of determination (r^2) shows that tangibility exhibits 29.4 per cent of variation in the capital structure.

Non-debt Tax Shield

Non-debt tax shield exhibits a positive correlation with the capital structure. This shows that firm with high level of non-debt tax shield leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that 23.9 per cent of variation in capital structure is due to the non-debt tax shield.

Inflation

Inflation (-0.297) and capital structure are negatively correlated with each other. This shows that decrease in inflation rate would increase the debt level in the capital mix. The coefficient of determination (r^2) shows that inflation rate accounts for 8.80 per cent of variation in capital structure.

GDP

The value of correlation coefficient (-0.286) shows a negative significant relationship between GDP and capital structure. The negative correlation implies that decline in GDP leads to increase in the debt level of capital mix. The coefficient of determination (r^2) reveals that GDP accounts for 8.20 per cent of variation in capital structure.

Variables Associated with Capital Structure in Healthcare Industry under Mid cap

The table 5.2 gives the details of selected variables associated with the capital structure of mid cap companies in healthcare industry. The association is analysed using the correlation coefficient and coefficient of determination.

Out of sixteen variables selected, eight variables are found to be significant. Current ratio, Interest coverage ratio, profitability, Size of the firm, tax rate, Age of the firm, Tangibility and Non-debt tax shield are found to be significant at one per cent level.

Table 5.2 : Variables Associated with Capital Structure - Healthcare Industry (Mid cap)

Variables	r	r^2
Current Ratio	0.439**	0.193
Interest Coverage Ratio	0.421**	0.177
Profitability	0.443**	0.196
Size of the firm	-0.323**	0.104
Tax rate	-0.326**	0.106
Age of the firm	-0.349**	0.122
Return on Equity	-0.180	0.032
Growth	0.055	0.003
Tangibility	0.633**	0.400
Non-debt Tax Shield	-0.358**	0.128
Dividend Payout Ratio	0.088	0.008
Cost of Debt	0.054	0.003
Cost of Equity	-0.171	0.029
Inflation	0.150	0.022
GDP	-0.119	0.014
Bank Rate	0.007	0.000

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Current ratio

The correlation coefficient 0.439 shows a positive significant relationship between current ratio and capital structure. It indicates that the increase in liquid assets would increase the debt level in the capital mix. The coefficient of determination (r^2) shows that current ratio shows 19.3 per cent of variation in the capital structure.

Interest coverage ratio

Interest coverage ratio (0.421) and capital structure are positively correlated. It is clear from the analysis that this variable is measured as the ratio of EBIT and interest. It implies that increase in ICR would increase the debt level in the capital mix. The coefficient of determination (r^2) shows that interest coverage ratio depicts 17.7 per cent of variations in capital structure.

Profitability

Profitability (0.443) exhibits a positive correlation with the capital structure. Increase in profitability of the firm leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that 19.6 per cent of variation in capital structure is due to the changes in profitability.

Size of the firm

Size of the firm (-0.323) and capital structure are negatively correlated with each other. Negative association infers that decrease in size of the firm would increase the debt level in the capital mix. The coefficient of determination (r^2) shows that 10.4 per cent of variation in capital structure is due to the changes in size of the firm.

Tax rate

Tax rate (-0.326) have a negative significant association with the capital structure. It infers that reduction in tax rate leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that tax rate depicts 10.6 per cent of variations in capital structure.

Age of the firm

The correlation coefficient -0.349 shows a negative relationship between age of the firm and capital structure. The negative correlation implies that the debt level in the capital mix is high with short run companies. The coefficient of determination (r^2) reveals that 12.2 per cent of variation in capital structure.

Tangibility

Tangibility (0.633) exhibits a positive correlation with the capital structure. This infers that increases in fixed assets leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that 40.0 per cent of variation in capital structure is due to the tangibility.

Non-debt tax shield

Non-debt tax shield (0.358) and capital structure are negatively correlated with each other. Negative association indicates that decrease in non- debt tax shield, would decrease the debt level in the capital mix. The coefficient of determination (r^2) shows that 12.8 per cent of variation in capital structure is due to the changes in non - debt tax shield.

Variables Associated with Capital Structure in Healthcare Industry under Small cap

The table 5.3 gives the details of selected variables associated with the capital structure of small cap companies in healthcare industry. The association is analysed using the correlation coefficient and coefficient of determination.

Table 5.3 : Variables Associated with Capital Structure - Healthcare Industry (Small cap)

Variables	r	r^2
Current Ratio	-0.123	0.015
Interest Coverage Ratio	-0.270*	0.073
Profitability	-0.060	0.004
Size of the firm	0.163	0.027
Tax rate	-0.098	0.010
Age of the firm	0.116	0.013
Return on Equity	0.199	0.040
Growth	-0.062	0.004
Tangibility	-0.630**	0.397
Non-debt Tax Shield	-0.317**	0.100
Dividend Payout Ratio	-0.134	0.018
Cost of Debt	0.394**	0.155
Cost of Equity	-0.141	0.020
Inflation	0.139	0.019
GDP	0.042	0.002
Bank Rate	-0.005	0.000

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Out of sixteen variables selected, four variables are found to be significant. Tangibility, Non-debt tax shield and Cost of debt are found to be significant at one per cent level. Interest coverage ratio is found to be significant at five per cent level.

Interest coverage ratio

The correlation coefficient -0.270 shows a negative relationship between interest coverage ratio and capital structure. It indicates that the debt level in the capital mix is more with companies where interest coverage ratio is low. The coefficient of determination (r^2) shows that interest coverage ratio accounts for7.3 per cent of variation in the capital structure.

Tangibility

The correlation coefficient value (-0.630) shows a negative relationship between tangibility and capital structure. The negative association implies that the debt level in the capital mix will be high for the companies with low fixed assets. The coefficient of determination (r^2) reveals that 39.7 per cent of variation in capital structure.

Non-debt tax shield

Non-debt tax shield (-0.317) have a negative association with capital structure. Negative association indicates that companies with low level of non-debt tax shield leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that 10.0 per cent of variation in capital structure is due to the change in non - debt tax shield.

Cost of debt

Cost of (0.394) and capital structure are positively correlated. Positive association indicates that increase in cost of debt leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that 15.5 per cent of variation in capital structure is due to the change in cost of debt.

Thus the correlation analysis of the small, mid and large cap companies in healthcare industry infers that tangibility and non-debt tax shield have a significant relationship with capital structure.

5.2.2 MULTIPLE RERGRESSION OF HEALTHCARE INDUSTRY

Determinants of Capital Structure in Healthcare Industry under Large cap

The table 5.4 shows the combined influence of the selected variables on the capital structure of large cap companies in healthcare industry.

Table 5.4 : Determinants of Capital Structure - Healthcare Industry (Large cap)

Variables	Regression coefficient	Standard error	T
Current Ratio	-0.010	0.034	-0.286
Interest Coverage Ratio	-0.002	0.003	-0.750
Profitability	-0.004	0.005	-0.933
Size of the firm	-0.227	0.116	-1.954
Tax rate	-0.223	0.249	-0.897
Age of the firm	0.004	0.004	1.102
Return on Equity	0.001	0.004	0.257
Growth	0.001	0.000	1.466
Tangibility	1.582**	0.585	2.705
Non-debt Tax Shield	-9.590	7.358	-1.303
Dividend Payout Ratio	0.002	0.004	0.474

Variables	Regression coefficient	Standard error	T
Cost of Debt	-0.007	0.019	-0.378
Cost of Equity	-0.014*	0.006	-2.380
Inflation	-0.032*	0.015	-2.091
GDP	0.000	0.000	-0.345
Bank Rate	0.053	0.051	1.053

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Constant : 1.296

Std. Error of Estimate : 0.534

$\overline{R}^2$: 0.417

R^2 : 0.543**

Out of the 16 variables introduced for regression analysis, only three are found to have significant association with the capital structure. They are, i) tangibility ii) cost of equity and iii) inflation.

Tangibility

The regression coefficient between tangibility and capital structure is 1.582, which is significant at one per cent level. It implies that the tangibility positively influences the capital structure. A unit increase in tangibility shall increase the capital structure by 1.582 units. Higher the tangibility, more leveraged the companies are.

Cost of equity

Cost of equity shows a negative influence on the capital structure. The regression coefficient is significant at five per cent level. It indicates that a unit decrease in cost of equity shall increase the capital structure by 0.014 units. Reduction in cost of equity leads to increase in capital structure.

Inflation

The regression coefficient between inflation and capital structure shows a negative influence with each other and it is significant at five per cent level. A unit decrease in inflation shall increase the capital structure by 0.032 units. Decline in inflation rate leads to increase in capital structure.

The value of R^2 is found to be significant at one per cent level. This shows that the regression equation framed is a good fit. The value of R^2 indicates that around 54.3 per cent of variations in the capital structure has been explained by the independent variables.

Determinants of Capital Structure in Healthcare Industry under Mid cap

The table 5.5 shows the combined influence of the selected variables on the capital structure of mid cap companies in healthcare industry.

Table 5.5 : Determinants of Capital Structure - Healthcare industry (Mid cap)

Variables	Regression coefficient	Standard error	T
Current Ratio	-0.139	0.117	-1.188
Interest Coverage Ratio	0.008	0.006	1.278
Profitability	0.010	0.008	1.200
Size of the firm	-0.497	0.384	-1.294
Tax rate	-1.362**	0.466	-2.923
Age of the firm	-0.002	0.004	-0.437
Return on Equity	-0.008	0.006	-1.378
Growth	-0.002	0.004	-0.652
Tangibility	0.926**	0.152	6.094
Non-debt Tax Shield	-11.327*	4.460	-2.540
Dividend Payout Ratio	-0.007*	0.003	-2.158
Cost of Debt	-0.109**	0.016	-6.681
Cost of Equity	0.022	0.034	0.632
Inflation	0.023	0.020	1.144
GDP	0.000	0.000	-0.290
Bank Rate	0.041	0.060	0.676

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Constant : 3.393

Std. Error of Estimate : 1.119

$\overline{R}^2$: 0.712

R^2 : 0.774**

Out of the 16 variables introduced for regression analysis, only five are found to have significant association with the capital structure. They are, i) Tax rate ii) tangibility iii) non-debt tax shield iv) dividend pay-out ratio and v) cost of debt.

Tax rate

The regression coefficient indicates that Tax rate negatively influence the capital structure which is significant at one per cent level. The value of regression implies that a unit decrease in Tax rate shall increase the capital structure by 1.362 unit. It is evident that decrease in tax provision will leads to increase in debt level of capital structure.

Tangibility

The regression coefficient shows that the tangibility positively influences the capital structure which is significant at one per cent level. The value of regression indicates that a unit increase in fixed asset shall increase the capital structure by 0.926 units. Companies with a high level of tangibility prefer debt financing for their capital structure.

Non-debt tax shield

Non-debt tax shield (-11.327) negatively influences the capital structure. It is significant at five per cent level. It indicates that a unit decrease in non-debt tax shield shall increase the capital structure by 11.327 units. Decrease in non-debt tax shield leads to increase in capital structure.

Dividend payout ratio

The regression coefficient indicates that the dividend payout ratio negatively influence the capital structure which is significant at one per cent level. The regression coefficient value shows that a unit decrease in dividend payout ratio shall increase the capital structure by 0.007 unit. Lower level of dividend payout ratio leads to higher level of capital structure.

Cost of debt

The regression coefficient indicates that cost of debt negatively influence the capital structure. The value of regression indicates that a unit decrease in cost of debt shall increase the capital structure by -0.109 units. Reduction in cost of debt leads to increase in capital structure.

The value of R^2 is found to be significant at one per cent level. This shows that the regression equation framed is a good fit. The value of R^2 indicates that around 77.4 per cent of variations in the capital structure has been explained by the independent variables.

Determinants of Capital Structure in Healthcare Industry under Small cap

The table 5.6 shows the combined influence of the selected variables on the capital structure of small cap companies in healthcare industry.

Table 5.6 : Determinants of Capital Structure - Healthcare Industry (Small cap)

Variables	Regression coefficient	Standard error	T
Current Ratio	0.083	0.332	0.248
Interest Coverage Ratio	-0.017	0.069	-0.246
Profitability	-0.029	0.020	-1.486
Size of the firm	1.871**	0.511	3.665
Tax rate	1.080	0.673	1.605
Age of the firm	0.042	0.074	0.575
Return on Equity	0.004	0.014	0.305
Growth	-0.001	0.002	-0.237
Tangibility	-7.173**	1.005	-7.141
Non-debt Tax Shield	11.617*	5.459	2.128
Dividend Payout Ratio	-0.016	0.014	-1.207
Cost of Debt	0.091	0.049	1.845
Cost of Equity	0.048	0.186	0.258
Inflation	0.020	0.055	0.366
GDP	0.000	0.000	-1.665
Bank Rate	-0.297	0.192	-1.545

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Constant : 1.667

Std. Error of Estimate : 2.560

$\overline{R}^2$: 0.577

R^2 : 0.668**

Out of the 16 variables introduced for regression analysis, only three are found to have significant association with capital structure. They are, i) size of the firm ii) tangibility and iii) non-debt tax shield.

Size of the firm

The regression coefficient indicates that size of the firm positively influences the capital structure which is significant at one per cent level. The value of regression coefficient inferred that a unit increase in asset size shall increase the capital structure by 1.871. The larger companies are expected to employ higher amount of debt capital in their capital structure.

Tangibility

Tangibility negatively influences the capital structure. The value of regression coefficient is -7.173 and it is significant at one per cent level. It indicates that a unit decrease in assets shall increase the capital structure by 7.173 unit. Low level of fixed assets leads to higher level of capital structure.

Non-debt tax shield

The regression coefficient between non-debt tax shield and capital structure is 11.617, which is positively significant at five per cent level. It implies that the non-debt tax shield highly influence the capital structure. A unit of increase in non-debt tax shield, increases the capital structure by 11.617 unit.

The value of R^2 is found to be significant at one per cent level. This shows that the regression equation framed is a good fit. The value of R^2 indicates that around 66.8 per cent of variations in the capital structure has been explained by the independent variables

From the above, it is concluded that tangibility have a significant influence on capital structure in case of large cap, mid cap and small cap companies of the healthcare industry.

5.2.3 STEP- WISE REGRESSION OF HEALTHCARE INDUSTRY

Variables Prominently Associated with Capital Structure in Healthcare Industry under Large cap

To find out the prominent variables that account for the variations in capital structure, step-wise regression has been carried out. The variables namely tangibility, size of the firm, cost of equity and inflation are the prominent variables that accounts for the variation in capital structure.

Table 5.7 : Variables Prominently Associated with Capital Structure - Healthcare Industry (Large cap)

Step	Constant	TANG	Size of the firm	COE	Inflation	R^2
1	0.236	1.161				0.294
2	1.167	0.753	-0.192			0.372
3	1.043	0.869	-0.158	-0.013		0.419
4	1.295	0.764	-0.167	-0.012	-0.027	0.453

In step wise regression, the variable ‘tangibility’ has been introduced in the first step. This variable contributes 29.4 per cent to the variation in capital structure. Size of the

firm is the second variable that is introduced in step two. It has increased the contribution by 7.80 per cent. Cost of equity a third variable has increased the contribution from 37.2 per cent to 41.9 per cent. The contribution get further increased by 3.40 per cent to 45.30 per cent, with the introduction of variable 'inflation'. The total contribution of four variables namely tangibility, size of the firm, cost of equity and inflation amounts to 45.30 per cent. The R^2 value of multiple regression amounts to 54.30 per cent. The difference of 9.00 per cent is due to the contribution of other variables.

Variables Prominently Associated with Capital Structure in Healthcare Industry under Mid cap

To find out the prominent variables that account for the variations in capital structure, step-wise regression has been carried out. The variables namely tangibility, non debt tax shield, cost of debt, tax rate and GDP are the prominent variables that accounts for the variation in capital structure.

Table 5.8 : Variables Prominently Associated with Capital Structure - Healthcare Industry (Mid cap)

Step	Constant	TANG	NDTS	COD	Tax rate	GDP	R^2
1	0.154	0.872					0.400
2	0.625	0.810	-10.528				0.462
3	1.099	0.987	-14.014	-0.057			0.555
4	1.731	1.008	-10.720	-0.099	-1.559		0.664
5	2.145	1.042	-10.014	-0.095	-1.778	0.000	0.726

In the step wise regression equation the variable 'tangibility' is included as the first variable and the contribution of this variable is found to be 40.0 per cent. In the second step the variable 'non-debt tax shield' is introduced. This variable along with tangibility shows 46.2 per cent variations in the capital structure. The contribution has increased by 6.2 per cent. Cost of debt as a third variable has increased the contribution by 9.3 per cent. Tax is the fourth variable that is introduced and it has increased the contribution from 55.5 per cent to 66.4 per cent. The contribution get further increased by 6.2 per cent to 72.6 per cent with the introduction of variable 'GDP'. The total contribution of five variables amounts to 72.6 per cent. The R^2 value of multiple regression amounts to 77.4 per cent. The difference of 4.8 per cent is due to the contribution of other variables.

Variables Prominently Associated with Capital Structure in Healthcare Industry under Small cap

To find out the prominent variables that account for the variations in capital structure, step-wise regression has been carried out. The variables namely tangibility, size of the firm, Bank rate and interest coverage ratio are the prominent variables that accounts for the variation in capital structure.

Table 5.9 : Variables Prominently Associated with Capital Structure - Healthcare Industry (Small cap)

Step	Constant	TANG	Size of the firm	Bank Rate	ICR	R^2
1	4.152	-5.470				0.397
2	1.582	-6.047	1.142			0.490
3	4.148	-6.722	1.448	-0.444		0.554
4	4.883	-6.525	1.344	-0.488	-0.086	0.583

In step wise regression the first step, the variable 'tangibility' has been introduced. This variable contributes 39.7 per cent to the variation in capital structure. Size of the firm is the second variable that is introduced in step two. It has increased the contribution by 9.30 per cent. Bank rate a third variable has increased the contribution from 49.0 per cent to 55.4 per cent. The contribution get further increased by 2.90 per cent to 58.3 per cent, with the introduction of variable 'interest coverage ratio'. The total contribution of four variables namely tangibility, size of the firm, bank rate and interest coverage ratio amounts to 58.3 per cent. The R^2 value of multiple regression amounts to 66.8 per cent. The difference of 8.50 per cent is due to the contribution of other variables.

On the whole the variables namely tangibility and size of the firm are the predominant variable associated with capital structure in large, mid and small cap companies.

5.2.4 CORRELATION ANALYSIS OF HOTEL INDUSTRY

Variables Associated with Capital Structure in Hotel Industry under Large cap

The table 5.10 gives the details of selected variables associated with the capital structure of large cap companies in hotel industry. The association is analysed using the correlation coefficient and coefficient of determination.

Table 5.10 : Variables Associated with Capital Structure - Hotel Industry (Large cap)

Variables	r	r^2
Current Ratio	-0.160	0.026
Interest Coverage Ratio	-0.119	0.014
Profitability	-0.074	0.005
Size of the firm	-0.389**	0.151
Tax rate	0.015	0.000
Age of the firm	-0.074	0.005
Return on Equity	-0.032	0.001
Growth	0.074	0.005
Tangibility	-0.066	0.004
Non-debt Tax Shield	-0.048	0.002
Dividend Payout Ratio	-0.214	0.046
Cost of Debt	-0.083	0.007
Cost of Equity	-0.114	0.013
Inflation	-0.142	0.020
GDP	-0.183	0.033
Bank Rate	-0.091	0.008

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Out of sixteen variables selected, only one variable is found to be significant. Size of the firm of the firm is found to be significant at one per cent level.

Size of the firm

Size of the firm (-0.389) exhibits a negative correlation with the capital structure. It implies that decrease in size of the firm would increase the debt level in the capital mix. The coefficient of determination (r^2) shows that 15.1 per cent of variation in capital structure is due to the changes in size of the firm.

Variables Associated with Capital Structure in Hotel Industry under Mid cap

The table 5.11 gives the details of selected variables associated with the capital structure of mid cap companies in hotel industry. The association is analysed using the correlation coefficient and coefficient of determination.

Table 5.11 : Variables Associated with Capital Structure - Hotel Industry (Mid cap)

Variables	r	r^2
Current Ratio	-0.064	0.004
Interest Coverage Ratio	-0.215	0.046
Profitability	-0.145	0.021
Size of the firm	-0.222	0.050
Tax rate	0.501**	0.251
Age of the firm	-0.082	0.007
Return on Equity	-0.447**	0.200
Growth	-0.061	0.004
Tangibility	0.306**	0.093
Non-debt Tax Shield	0.023	0.001
Dividend Payout Ratio	-0.324**	0.105
Cost of Debt	-0.387**	0.150
Cost of Equity	-0.168	0.028
Inflation	-0.132	0.018
GDP	-0.174	0.030
Bank Rate	-0.092	0.009

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Out of sixteen variables selected, five variables are found to be significant. Tax rate, Return on equity, Tangibility, Dividend payout ratio and Cost of debt are found to be significant at one per cent level.

Tax rate

The correlation coefficient value 0.501 shows a positive relationship between Tax rate and capital structure. The positive association implies that as increases in the tax rate leads to increase in the debt level of capital mix. The coefficient of determination (r^2) reveals that 25.1 per cent of variation in capital structure.

Return on equity

Return on equity (-0.447) of the companies have an inverse relationship with capital structure. Negative association indicates that decreases in return on equity would increase

the debt level in the capital mix. The coefficient of determination (r^2) shows that 20.0 per cent of variation in capital structure is due to the change in return on equity.

Tangibility

Tangibility (0.306) exhibits a positive correlation with the capital structure. Positive association indicates that increase in fixed asset leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that tangibility accounts for 9.30 per cent of variation in capital structure.

Dividend payout ratio

Dividend payout ratio (-0.324) is found to be negatively associated with capital structure. The value of correlation coefficient inferred that the decrease in dividend payout ratio would increase the debt level in the capital mix. The coefficient of determination (r^2) shows that 10.5 per cent of variations in capital structure due to the changes in dividend payout ratio.

Cost of debt

Cost of debt (-0.387) and capital structure is found to be negatively associated with each other. It implies that lower level of cost of debt leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that cost of debt accounts for 15.0 per cent of variation in capital structure.

Variables Associated with Capital Structure in Hotel Industry under Small cap

The table 5.12 gives the details of selected variables associated with the capital structure of small cap companies in hotel industry. The association is analysed using the correlation coefficient and coefficient of determination.

Table 5.12: Variables Associated with Capital Structure -Hotel Industry (Small cap)

Variables	r	r^2
Current Ratio	-0.036	0.001
Interest Coverage Ratio	-0.110	0.012
Profitability	-0.125	0.016
Size of the firm	-0.180	0.033
Tax rate	0.189	0.036
Age of the firm	0.099	0.010

Variables	r	r^2
Return on Equity	-0.641**	0.411
Growth	-0.041	0.002
Tangibility	0.034	0.001
Non-debt Tax Shield	0.241*	0.058
Dividend Payout Ratio	-0.195	0.038
Cost of Debt	-0.225	0.050
Cost of Equity	-0.117	0.014
Inflation	-0.162	0.026
GDP	-0.370**	0.137
Bank Rate	-0.240*	0.058

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Out of sixteen variables selected, four variables are found to be significant. Return on equity and GDP are found to be significant at one per cent level. Non debt tax shield and Bank rate are found to be significant at five per cent level.

Return on equity

The correlation coefficient value (-0.641) shows a negative relationship between return on equity and capital structure. The negative association implies that decrease in return on equity would increase the debt level in the capital mix. The coefficient of determination (r^2) reveals that 41.1 per cent of variation in capital structure.

Non-debt tax shield

Non-debt tax shield and capital structure are positively correlated. Positive association indicates that increases in non-debt tax shield, will increases the debt level in the capital mix. The coefficient of determination (r^2) shows that non-debt tax shield accounts for 5.8 per cent of variation in capital structure.

GDP

GDP (-0.370) exhibits a negative correlation with capital structure. It inferred that decreases in GDP leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that 13.7 per cent of variation in capital structure is due to the changes in GDP.

Bank rate

The variable bank rate (-0.240) is found to be negatively associated with the capital structure. Negative association indicates that decline in bank rate leads to increase in the

debt level of capital mix. The coefficient of determination (r^2) shows that 5.8 per cent of variations in capital structure due to the changes in bank rate.

The capital structure of large cap companies in hotel industry have significant association with size of the firm. In case of mid cap and small cap companies, return on equity have a significant relationship with capital structure in hotel industry.

5.2.5 MULTIPLE REGRESSION OF HOTEL INDUSTRY

Determinants of Capital Structure in Hotel Industry under Large cap

The table below shows the combined influence of the selected variables on the capital structure of large cap companies in hotel industry.

Table 5.13 : Determinants of Capital Structure - Hotel Industry (Large cap)

Variables	Regression coefficient	Standard error	T
Current Ratio	-0.675	1.219	-0.554
Interest Coverage Ratio	-0.124	0.106	-1.173
Profitability	-0.915*	0.360	-2.540
Size of the firm	-23.982**	5.008	-4.789
Tax rate	5.078	4.351	1.167
Age of the firm	0.168**	0.057	2.960
Return on Equity	-0.035	0.029	-1.191
Growth	0.004	0.045	0.099
Tangibility	15.936	10.321	1.544
Non-debt Tax Shield	-76.168	265.311	-0.287
Dividend Payout Ratio	-0.071	0.044	-1.599
Cost of Debt	0.697	0.460	1.515
Cost of Equity	0.823	0.670	1.230
Inflation	0.107	0.319	0.334
GDP	0.000	0.000	0.590
Bank Rate	-0.085	1.057	-0.080

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Constant : 95.501

Std. Error of Estimate : 17.046

$\overline{R}^2$: 0.352

R^2 : 0.492**

Out of the 16 variables introduced for regression analysis, only three are found to have significant association with capital structure. They are, i) profitability ii) size of the firm and iii) age of the firm.

Profitability

The regression coefficient indicates that the variable profitability negatively influences the capital structure and it is significant at five per cent level. It implies that the variable profitability negatively influence the capital structure. A unit of decrease in profitability leads to an increase in capital structure by 0.915 unit. Decline in profitability leads to higher level of capital structure.

Size of the firm

Size of the firm negatively influences the capital structure and it is significant at one per cent level. It indicates that size of the firm highly influence the capital structure. It is inferred that a unit decrease in size of the firm shall increase the capital structure by 23.982 unit.

Age of the firm

The regression coefficient indicates that age of the firm positively influences the capital structure and it is significant at one per cent level. It depicts that increase in age of the firm leads to an increase in capital structure by 0.168 unit. The companies with long years of existence are with high level of capital structure.

The value of R^2 is found to be significant at one per cent level. This shows that the regression equation framed is a good fit. The value of R^2 indicates that around 49.2 per cent of variations in the capital structure has been explained by the independent variables

Determinants of Capital Structure in Hotel Industry under Mid cap

The table 5.14 shows the combined influence of the selected variables on the capital structure of mid cap companies in Hotel Industry.

Out of the 16 variables introduced for regression analysis, six variables are found to have significant association with capital structure. They are, i) size of the firm ii) Tax rate iii) age of the firm iv) return on equity v) dividend payout ratio and vi) GDP.

Table 5.14 : Determinants of Capital Structure - Hotel Industry (Mid cap)

Variables	Regression coefficient	Standard error	T
Current Ratio	-0.079	0.174	-0.455
Interest Coverage Ratio	-0.001	0.002	-0.584
Profitability	0.006	0.021	0.288
Size of the firm	-1.584**	0.518	-3.058
Tax rate	1.617**	0.518	3.120
Age of the firm	0.037*	0.017	2.158
Return on Equity	-0.024*	0.010	-2.541
Growth	0.002	0.003	0.540
Tangibility	1.366	0.696	1.962
Non-debt Tax Shield	-27.198	15.375	-1.769
Dividend Payout Ratio	-0.022**	0.006	-3.831
Cost of Debt	-0.003	0.037	-0.087
Cost of Equity	0.029	0.036	0.808
Inflation	0.004	0.037	0.114
GDP	0.000**	0.000	-2.774
Bank Rate	-0.027	0.112	-0.240

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Constant : 7.070

Std. Error of Estimate : 1.909

$\overline{R}^2$: 0.637

R^2 : 0.716**

Size of the firm

The regression coefficient indicates that size of the firm negatively influences the capital structure. The value of regression coefficient indicates that a unit of decrease in size of the firm shall increase the capital structure by 1.584 units. It is evident that decrease in size of the firm leads to an increase in the debt level of capital structure.

Tax rate

The regression coefficient indicates that tax rate positively influences the capital structure and this association is found to be significant at one per cent level. It indicates that a unit increase in tax provision shall increase the capital structure by 1.617 unit. High level of tax rate leads to high level of capital structure.

Age of the firm

The Regression coefficient indicates that age of the firm positively influences the capital structure which is significant at five per cent level. It inferred that a unit increase in age of the firm shall increase the capital structure by 0.037 unit. It is evident that the companies with long existence are with high level of capital structure.

Return on equity

The regression coefficient indicates that the return on equity negatively influences the capital structure and it is significant at five per cent level. A unit of decrease in return on equity shall increase the capital structure by 0.024 unit. Reduction in return on equity leads to increase the debt level in capital structure.

Dividend payout ratio

The variable dividend payout ratio negatively influences the capital structure and it is significant at one per cent level. It is inferred that a unit decrease in dividend payout ratio shall increase the capital structure by 0.022 unit. Lower dividend payout ratio leads to higher level of capital structure.

GDP

The regression coefficient indicates that GDP positively influences the capital structure. The regression coefficient is significant at one per cent level. It depicts that one unit increase in GDP, increases the capital structure by 0.000 unit. Increase in GDP leads to higher level of capital structure.

The value of R^2 is found to be significant at one per cent level. This shows that the regression equation framed is a good fit. The value of R^2 indicates that around 71.6 per cent of variations in the capital structure has been explained by the independent variables

Determinants of Capital Structure in Hotel Industry under Small cap

The table 5.15 shows the combined influence of the selected variables on the capital structure of small cap companies in hotel industry.

Table 5.15 : Determinants of Capital Structure - Hotel Industry (Small cap)

Variables	Regression coefficient	Standard error	T
Current Ratio	-0.031	0.120	-0.260
Interest Coverage Ratio	-0.017	0.023	-0.753
Profitability	0.063	0.070	0.896
Size of the firm	0.367	0.547	0.672
Tax rate	-0.051	0.691	-0.074
Age of the firm	0.055*	0.021	2.609
Return on Equity	-0.054**	0.016	-3.403
Growth	-0.005	0.009	-0.591
Tangibility	-1.881	1.782	-1.056
Non-debt Tax Shield	67.171*	32.200	2.086
Dividend Payout Ratio	-0.025*	0.012	-2.144
Cost of Debt	-0.080	0.087	-0.922
Cost of Equity	0.186	0.148	1.260
Inflation	-0.046	0.071	-0.642
GDP	0.000**	0.000	-3.303
Bank Rate	0.161	0.230	0.702

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Constant : -0.662

Std. Error of Estimate : 2.372

$\overline{R}^2$: 0.543

R^2 : 0.642**

Out of the 16 variables introduced for regression analysis, five variables are found to have significant association with capital structure. They are, i) age of the firm ii) return on equity iii) non-debt tax shield iv) dividend payout ratio and v) GDP.

Age of the firm

The regression coefficient indicates that age of the firm positively influences the capital structure. It is indicates that a unit increase in age of the firm shall increase the capital structure by 0.055 units. It is evident that the companies with long existence are with high level of capital structure.

Return on equity

The regression coefficient indicates that return on equity negatively influences the capital structure and this association is found to be significant at one per cent level. It shows that a unit decrease in return on equity shall increase the capital structure by 0.054 unit. Reduction in return on equity leads to increase the debt level in capital structure.

Non-debt tax shield

The Regression coefficient indicates that non-debt tax shield positively influences the capital structure which is significant at five per cent level. It inferred that a unit increase in non-debt tax shield, shall increases the capital structure by 67.171 unit. Higher level of non-debt tax shield leads to higher level of capital structure.

Dividend payout ratio

The regression coefficient shows that the dividend payout ratio negatively influences the capital structure and it is significant at five per cent level. A unit of decrease in dividend payout ratio shall increase the capital structure by 0.025 unit. Reduction in dividend payout ratio increases the debt level of capital structure.

GDP

The variable GDP positively influences the capital structure. The value of regression coefficient is significant at one per cent level. It is inferred that a unit increase in GDP shall increase the capital structure by 0.000 unit. Increase in GDP leads to higher level of capital structure.

The value of R^2 is found to be significant at one per cent level. This shows that the regression equation framed is a good fit. The value of R^2 indicates that around 64.2 per cent of variations in the capital structure has been explained by the independent variables.

From the above analysis, that return on equity, dividend payout ratio and GDP have more influence with capital structure in mid cap and small cap companies. For the hotel industry as a whole, the variable age of the firm have more significant than the other select variables in influencing the capital structure.

5.2.6 STEP- WISE REGRESSION OF HOTEL INDUSTRY

Variables Prominently Associated with Capital Structure in Hotel Industry under Large cap

To find out the prominent variables that account for the variations in capital structure, step-wise regression has been carried out. The variables namely size of the firm, profitability and current ratio are the prominent variables that accounts for the variation in capital structure.

Table 5.16 : Variables Prominently Associated with Capital Structure - Hotel Industry (Large cap)

Step	Constant	Size of the firm	Profitability	CR	R^2
1	33.817	-7.161			0.151
2	61.648	-11.830	-0.776		0.282
3	65.670	-12.344	-0.756	-2.182	0.326

In the step wise regression equation the variable 'size of the firm' is included as the first variable and the contribution of this variable is found to be 15.1 per cent. In the second step the variable 'profitability' is introduced. This variable along with size of the firm shows 28.2 per cent variations in the capital structure. The contribution has increased by 13.1 per cent. Current ratio as a third variable has increased the contribution by 4.4 per cent. The total contribution of three variables amounts to 32.6 per cent. The R^2 value of multiple regression amounts to 49.2 per cent. The difference of 16.6 per cent is due to the contribution of other variables.

Variables Prominently Associated with Capital Structure in Hotel Industry under Mid cap

To find out the prominent variables that account for the variations in capital structure, step-wise regression has been carried out. The variables namely tax rate, dividend payout ratio, GDP and return on equity are the prominent variables that accounts for the variation in capital structure.

Table 5.17 : Variables Prominently Associated with Capital Structure - Hotel Industry (Mid cap)

Step	Constant	Tax rate	DPR	GDP	ROE	R^2
1	0.271	1.659				0.251
2	0.779	1.810	-0.021			0.399
3	2.096	2.234	-0.028	0.000		0.589
4	2.466	1.880	-0.025	0.000	-0.021	0.636

In the step wise regression equation the variable 'Tax rate' is included as the first variable and the contribution of this variable is found to be 25.1 per cent. In the second step the variable 'dividend payout ratio' is introduced. This variable along with tangibility shows 39.9 per cent variations in the capital structure. The contribution has increased by

14.8 per cent. GDP as a third variable has increased the contribution from 39.9 to 58.9 per cent. The contribution get further increased by 4.7 per cent to 63.6 per cent with the introduction of variable 'return on equity'. The total contribution of four variables amounts to 63.6 per cent. The R^2 value of multiple regression amounts to 71.6 per cent. The difference of 8.0 per cent is due to the contribution of other variables.

Variables Prominently Associated with Capital Structure in Hotel Industry under Small cap

To find out the prominent variables that account for the variations in capital structure, step-wise regression has been carried out. The variables namely return on equity, GDP and non debt tax shield are the prominent variables that accounts for the variation in capital structure.

Table 5.18 : Variables Prominently Associated with Capital Structure - Hotel Industry (Small cap)

Step	Constant	ROE	GDP	NDTS	R^2
1	1.367	-0.075			0.411
2	2.687	-0.070	0.000		0.478
3	1.645	-0.067	0.000	44.800	0.556

In the step wise regression equation the variable 'return on equity' is included as the first variable and the contribution of this variable is found to be 41.1 per cent. In the second step the variable 'GDP' is introduced. This variable along with return on equity shows 47.8 per cent to variations in the capital structure. The contribution has increased by 6.8 per cent. Non-debt tax shield as a third variable has increased the contribution from 47.8 to 55.6 per cent. The contribution has increased by 7.8 per cent. The total contribution of three variables amounts to 55.6 per cent. The R^2 value of multiple regression amounts to 64.2 per cent. The difference of 8.6 per cent is due to the contribution of other variables

To sum up, the variable size of the firm is a prominent variable of capital structure in large cap companies while the variable namely GDP and ROE are the predominant variables associated with capital structure in mid and small cap companies.

5.2.7 CORRELATION ANALYSIS OF SOFTWARE INDUSTRY

Variables Associated with Capital Structure in Software Industry under Large cap

The table 5.19 gives the details of selected variables associated with the capital structure of large cap companies in software industry. The association is analysed using the correlation coefficient and coefficient of determination.

Table 5.19 : Variables Associated with Capital Structure - Software Industry (Large cap)

Variables	r	r^2
Current Ratio	-0.087	0.008
Interest Coverage Ratio	-0.074	0.005
Profitability	-0.321**	0.103
Size of the firm	-0.097	0.009
Tax rate	0.238*	0.056
Age of the firm	-0.052	0.003
Return on Equity	0.027	0.001
Growth	0.021	0.000
Tangibility	-0.023	0.001
Non-debt Tax Shield	-0.024	0.001
Dividend Payout Ratio	-0.042	0.002
Cost of Debt	-0.147	0.022
Cost of Equity	-0.149	0.022
Inflation	-0.080	0.006
GDP	-0.150	0.022
Bank Rate	-0.095	0.009

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Out of sixteen variables selected, two variables are found to be significant. Profitability is found to be significant at one per cent level. Tax rate is found to be significant at five per cent level.

Profitability

Profitability (-0.321) and capital structure are negatively correlated. It implies that decreases in profitability leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that profitability shows 10.3 per cent of variations in capital structure.

Tax rate

The correlation coefficient (0.238) shows a positive relationship between Tax rate and capital structure which is significant at five per cent level. It indicates that higher level of tax rate leads to an increase in debt level of capital mix. The coefficient of determination (r^2) depicts that tax accounts for 5.6 per cent of variation in the capital structure.

Variables Associated with Capital Structure in Software Industry under Mid cap

The table 5.20 gives the details of selected variables associated with the capital structure of mid cap companies in software industry. The association is analysed using the correlation coefficient and coefficient of determination.

Table 5.20 : Variables Associated with Capital Structure - Software Industry (Mid cap)

Variables	r	r^2
Current Ratio	-0.316**	0.100
Interest Coverage Ratio	-0.204	0.041
Profitability	-0.246*	0.061
Size of the firm	0.349**	0.122
Tax rate	0.712**	0.506
Age of the firm	-0.177	0.031
Return on Equity	-0.364**	0.133
Growth	-0.099	0.010
Tangibility	-0.016	0.000
Non-debt Tax Shield	0.020	0.000
Dividend Payout Ratio	-0.231*	0.053
Cost of Debt	-0.313**	0.098
Cost of Equity	-0.080	0.006
Inflation	-0.173	0.030
GDP	0.227	0.051
Bank Rate	0.051	0.003

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Out of sixteen variables selected, seven variables are found to be significant. Current ratio, Size of the firm, Tax rate, Return on equity and Cost of debt are found to be significant at one per cent level. Profitability and Dividend payout ratio are found to be significant at five per cent level.

Current ratio

Current ratio (-0.316) exhibits a negative correlation with capital structure. This shows that the decrease in liquid assets would increase the debt level in the capital mix. The coefficient of determination (r^2) shows that 10.0 per cent of variation in capital structure is due to the changes in current ratio.

Profitability

The correlation coefficient value -0.246 shows a negative relationship between profitability and capital structure. The negative correlation implies that decrease in the profitability leads to increase in the debt level of capital mix. The coefficient of determination (r^2) reveals that 6.1 per cent of variation in capital structure.

Size of the firm

Size of the firm and capital structure are positively correlated and the correlation coefficient value is 0.349. This shows that the increase in this ratio would increase the debt level in the capital mix. The coefficient of determination (r^2) shows that 12.2 per cent of variation in capital structure is due to the change in size of the firm.

Tax rate

The correlation coefficient shows that Tax rate is positively correlated with capital structure. It inferred that increase in tax provision leads to increase the debt level in the capital mix. The coefficient of determination (r^2) shows that 50.6 per cent of variation in capital structure is due to the changes in Tax rate.

Return on equity

The correlation coefficient -0.364 shows a negative relationship between return on equity and capital structure. The negative correlation implies that the decrease in return on equity would increase the debt level in the capital mix. The coefficient of determination (r^2) reveals that 13.3 per cent of variation in capital structure.

Dividend payout ratio

Dividend payout ratio and capital structure are negatively correlated and the correlation coefficient is -0.231. It depicts that low rate of dividend payout ratio leads to

higher level of debt in the capital mix. The coefficient of determination (r^2) shows that 5.3 per cent of variation in capital structure is due to the change in dividend payout ratio.

Cost of debt

The correlation coefficient value (-0.313) shows a negative relationship between cost of debt and capital structure. The negative correlation shows that reduction in cost of debt leads to increase in the debt level of capital mix. The coefficient of determination (r^2) reveals that 9.8 per cent of variation in capital structure.

Variables Associated with Capital Structure in Software Industry under Small cap

The table 5.21 gives the details of selected variables associated with the capital structure of small cap companies in software industry. The association is analysed using the correlation coefficient and coefficient of determination.

Table 5.21 : Variables Associated with Capital Structure - Software Industry (Small cap)

Variables	r	r^2
Current Ratio	-0.430**	0.184
Interest Coverage Ratio	-0.150	0.022
Profitability	-0.096	0.009
Size of the firm	-0.197	0.039
Tax rate	0.059	0.003
Age of the firm	0.161	0.026
Return on Equity	-0.352**	0.124
Growth	-0.165	0.027
Tangibility	0.287*	0.082
Non-debt Tax Shield	0.238*	0.057
Dividend Payout Ratio	-0.036	0.001
Cost of Debt	0.078	0.006
Cost of Equity	-0.041	0.002
Inflation	-0.056	0.003
GDP	-0.151	0.023
Bank Rate	-0.160	0.026

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Out of sixteen variables selected, four variables are found to be significant. Current ratio, and Return on equity are found to be significant at one per cent level. Tangibility and Non debt tax shield are found to be significant at five per cent level.

Current ratio

The correlation coefficient value (-0.430) shows a negative relationship between current ratio and capital structure. It implies that decrease in liquid asset leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that current ratio accounts for 18.4 per cent of variation in the capital structure.

Return on equity

Return on equity exhibits a negative correlation with capital structure and the correlation coefficient value is -0.352. This shows that the decrease in return on equity would increase the debt level in the capital mix. The coefficient of determination (r^2) shows that 12.4 per cent of variation in capital structure is due to the return on equity.

Tangibility

Tangibility (0.287) and capital structure are positively correlated. It indicates that increase in fixed asset leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that 8.20 per cent of variation in capital structure is due to the change in tangibility.

Non-debt tax shield

The correlation coefficient (0.238) shows a positive relationship between non-debt tax shield and capital structure. The positive correlation implies that increase in non debt tax leads to an increase in debt level of capital mix. The coefficient of determination (r^2) reveals that non-debt tax shield accounts for 5.7 per cent of variation in capital structure.

It is observed from the above analysis that, profitability and tax rate have significant association with capital structure in large and mid cap companies. On the whole, there is no variables have a common association with capital structure.

5.2.8 MULTIPLE REGRESSION OF SOFTWARE INDUSTRY

Determinants of Capital Structure in Software Industry under Large cap

The table 5.22 shows the combined influence of the selected variables on the capital structure of large cap companies in software industry.

Table 5.22 : Determinants of Capital Structure - Software Industry (Large cap)

Variables	Regression coefficient	Standard error	T
Current Ratio	-0.211	0.149	-1.417
Interest Coverage Ratio	0.000	0.000	0.854
Profitability	-0.090**	0.019	-4.704
Size of the firm	0.462	0.272	1.701
Tax rate	0.615	2.458	0.250
Age of the firm	-0.017*	0.008	-2.129
Return on Equity	0.027**	0.010	2.757
Growth	0.000	0.000	0.259
Non-debt Tax Shield	0.105	0.093	1.128
Dividend Payout Ratio	-0.014*	0.006	-2.417
Cost of Debt	-0.004	0.011	-0.316
Cost of Equity	-0.004	0.079	-0.051
Inflation	-0.044	0.034	-1.272
GDP	0.000	0.000	-0.702
Bank Rate	0.015	0.115	0.134

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Constant : 1.376

Std. Error of Estimate : 1.005

$\overline{R}^2$: 0.244

R^2 : 0.397**

Out of the 16 variables introduced for regression analysis, only four are found to have significant association with capital structure. They are, i) profitability ii) age of the firm iii) return on equity and iv) dividend payout ratio.

Profitability

The regression coefficient indicates that the variable profitability negatively influence the capital structure and the value is significant at one per cent level. It implies that a unit decrease in profitability shall increase the capital structure by 0.090 units. Decline in profitability leads to higher level of capital structure.

Age of the firm

The regression coefficient indicates that age of the firm negatively influence the capital structure which is significant at five per cent level. It indicates that a unit decreases

in age of the firm shall increase the capital structure by 0.017 times. It is evident that the companies with short existence are with higher level of capital structure.

Return on equity

Return on equity shows a positive influence with capital structure and it is significant at one per cent level. It inferred that a unit increase in return on equity leads to increase in capital structure by 0.027 units. Increase in return on equity leads to increase in capital structure.

Dividend payout ratio

There is a negative influence between dividend payout ratio and capital structure which is significant at five per cent level. It depicts that one unit decrease in dividend payout ratio shall increases the capital structure by 0.014 times. Lower rate of dividend payout ratio leads to higher level of capital structure.

The value of R^2 is found to be significant at one per cent level. This shows that the regression equation framed is a good fit. The value of R^2 indicates that around 39.7 per cent of variations in the capital structure has been explained by the independent variables

Determinants of Capital Structure in Software Industry under Mid cap

The table 5.23 shows the combined influence of the selected variables on the capital structure of mid cap companies in software industry.

Table 5.23 : Determinants of Capital Structure - Software Industry (Mid cap)

Variables	Regression coefficient	Standard error	T
Current Ratio	-1.004**	0.299	-3.356
Interest Coverage Ratio	0.000	0.001	-0.277
Profitability	0.027	0.036	0.743
Size of the firm	1.500*	0.604	2.482
Tax rate	6.854**	0.955	7.175
Age of the firm	0.032	0.034	0.940
Return on Equity	-0.001	0.001	-1.853
Growth	-0.001	0.005	-0.179
Tangibility	-5.505	3.077	-1.789

Variables	Regression coefficient	Standard error	T
Non-debt Tax Shield	8.067	15.907	0.507
Dividend Payout Ratio	-0.001	0.029	-0.052
Cost of Debt	0.002	0.040	0.049
Cost of Equity	-0.217	0.173	-1.248
Inflation	-0.114	0.092	-1.236
GDP	0.000	0.000	-1.324
Bank Rate	0.308	0.301	1.024

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Constant : -3.050

Std. Error of Estimate : 2.568

$\overline{R}^2$: 0.635

R^2 : 0.714**

Out of the 16 variables introduced for regression analysis, only three are found to have significant association with capital structure. They are, i) current ratio ii) size of the firm and iii) Tax rate.

Current ratio

Current ratio negatively influences the capital structure and it is significant at one per cent level. Thus it is inferred that a unit decrease in liquidity shall increase the capital structure by 1.004 units. Decrease in liquidity leads to higher level of capital structure.

Size of the firm

The regression coefficient indicates that size of the firm positively influences the capital structure and it is found to be significant at five per cent level. It inferred that a unit increase in size of the firm shall increase the capital structure by 1.500 units. Increase in size of the firm leads to an increase in debt level of capital structure.

Tax rate

The regression coefficient indicates that Tax rate positively influences the capital structure which is significant at five per cent level. It shows that a unit increase in Tax rate shall increase the capital structure by 6.854 unit. Higher level of tax rate leads to higher level of capital structure.

The value of R^2 is found to be significant at one per cent level. This shows that the regression equation framed is a good fit. The value of R^2 indicates that around 71.4 per cent of variations in the capital structure has been explained by the independent variables

Determinants of Capital Structure in Software Industry under Small cap

The table 5.24 shows the combined influence of the selected variables on the capital structure of small cap companies in software industry. v) dividend payout ratio vi) inflation vii) GDP and viii) bank rate

Table 5.24 : Determinants of Capital Structure - Software Industry (Small cap)

Variables	Regression coefficient	Standard error	T
Current Ratio	-0.098**	0.026	-3.750
Interest Coverage Ratio	0.000	0.000	1.153
Profitability	-0.001	0.007	-0.120
Size of the firm	0.099	0.201	0.493
Tax rate	-0.006	0.172	-0.036
Age of the firm	0.130**	0.018	7.399
Return on Equity	-0.015**	0.003	-4.464
Growth	0.004*	0.001	2.428
Tangibility	-0.217	0.422	-0.514
Non-debt Tax Shield	2.462	2.168	1.135
Dividend Payout Ratio	-0.013**	0.003	-4.295
Cost of Debt	0.001	0.009	0.097
Cost of Equity	0.030	0.010	3.102
Inflation	-0.040**	0.014	-2.975
GDP	0.000**	0.000	-8.235
Bank Rate	0.099*	0.043	2.299

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Constant : -0.598

Std. Error of Estimate : 0.613

$\overline{R^2}$: 0.675

R^2 : 0.745**

Out of the 16 variables introduced for regression analysis, eight are found to have significant association with capital structure. They are, i) current ratio ii) age of the firm iii) return on equity iv) growth

Current ratio

The regression coefficient indicates that current ratio negatively influence the capital structure and it is significant at one per cent level. It inferred that a unit decrease in liquidity leads to increase in capital structure by 0.098 units. Decrease in liquidity leads to higher level of capital structure.

Age of the firm

The regression coefficient indicates that age of the firm positively influences the capital structure which is significant at one per cent level. It shows that a unit increase in age of the firm shall increase the capital structure by 0.130 units. The companies with long years of existence are with high level of capital structure.

Return on equity

The regression coefficient indicates that return on equity negatively influences the capital structure. The value of regression shows that a unit decrease in return on equity shall increase the capital structure by 0.015 units. Reduction in return on equity leads to increase in capital structure.

Growth

The regression coefficient between growth and capital structure is 0.004, which shows that growth positively influences the capital structure and it is found to be significant at five per cent level. It implies that a unit increase in growth shall increase the capital structure by 0.004 unit. High level of growth leads to higher level of capital structure.

Dividend payout ratio

The regression coefficient indicates that Dividend payout ratio negatively influences the capital structure and it is significant at one per cent level. It indicates that a unit decrease in dividend payout ratio shall increase the capital structure by 0.013 units. Lower level of dividend payout ratio leads to increase in capital structure.

Inflation

The regression coefficient indicates that inflation negatively influence the capital structure and it is significant at one per cent level. It depicts that a unit decrease in inflation

shall increase the capital structure by 0.040 times. Reduction in inflation leads to higher level of capital structure.

GDP

The regression coefficient indicates that GDP positively influences the capital structure and it is found to be significant at one per cent level. It inferred that increases in GDP by one unit increase the capital structure by 0.000 times. Higher level of GDP leads to higher level of capital structure.

Bank rate

The regression coefficient indicates that bank rate positively influences the capital structure and it is significant at five per cent level. It implies that a unit increase in bank rate shall increase the capital structure by 0.099 unit. High level of bank rate leads to higher level of capital structure.

The value of R^2 is found to be significant at one per cent level. This shows that the regression equation framed is a good fit. The value of R^2 indicates that around 74.5 per cent of variations in the capital structure has been explained by the independent variables

From the above analysis, that age of the firm, return on equity and dividend payout ratio have more influence with capital structure in large and small cap companies. On the whole, no variable have a common significant influence in software industry.

5.2.9 STEP- WISE REGRESSION OF SOFTWARE INDUSTRY

Variables Prominently Associated with Capital Structure in Software Industry under Large cap

To find out the prominent variables that account for the variations in capital structure, step-wise regression has been carried out. The variables namely profitability and return on equity are the prominent variables that accounts for the variation in capital structure.

Table 5.25 : Variables Prominently Associated with Capital Structure - Software Industry (Large cap)

Step	Constant	Profitability	ROE	R^2
1	1.010	-0.032		0.103
2	1.006	-0.065	0.029	0.224

In the step wise regression equation the variable 'profitability' is included as the first variable and the contribution of this variable is found to be 10.3 per cent. In the second step the variable 'return on equity' is introduced. This variable along with tangibility shows 22.4 per cent variations in the capital structure. The contribution has increased by 12.1 per cent. The total contribution of five variables amounts to 22.4 per cent. The R^2 value of multiple regression amounts to 39.7 per cent. The difference of 17.3 per cent is due to the contribution of other variables.

Variables Prominently Associated with Capital Structure in Software Industry under Mid cap

To find out the prominent variables that account for the variations in capital structure, step-wise regression has been carried out. The variables namely tax rate, current ratio, size of the firm and return on equity are the prominent variables that accounts for the variation in capital structure.

Table 5.26 : Variables Prominently Associated with Capital Structure - Software Industry (Mid cap)

Step	Constant	Tax rate	CR	Size of the firm	ROE	R^2
1	0.612	7.323				0.506
2	1.880	7.253	-0.662			0.596
3	-3.149	6.964	-0.588	1.325		0.642
4	-2.487	6.742	-0.534	1.102	-0.002	0.667

In step wise regression, the variable 'tax' has been introduced in the first step. This variable contributes 50.6 per cent to the variation in capital structure. Current ratio is the second variable that is introduced in step two. It has increased the contribution by 9.00 per cent. size of the firm a third variable has increased the contribution from 59.6 per cent to 64.1 per cent. The contribution get further increased by 2.5 per cent to 66.7 per cent, with the introduction of variable 'return on equity'. The total contribution of four variables namely Tax rate, current ratio, size of the firm and return on equity amounts to 66.7 per cent. The R^2 value of multiple regression amounts to 71.4 per cent. The difference of 4.7 per cent is due to the contribution of other variables.

Variables Prominently Associated with Capital Structure in Software Industry under Small cap

To find out the prominent variables that account for the variations in capital structure, step-wise regression has been carried out. The variables namely current ratio, return on equity, GDP, age of the firm, dividend payout ratio, cost of equity, inflation, growth and bank rate are the prominent variables that accounts for the variation in capital structure.

Table 5.27 : Variables Prominently Associated with Capital Structure - Software Industry (Small cap)

Step	Const	CR	ROE	GDP	Age of the firm	DPR	COE	Inflation	Growth	Bank Rate	R^2
1	0.723	-0.112									0.184
2	0.759	-0.099	-0.008								0.262
3	1.260	-0.109	-0.012	0.000							0.394
4	0.607	-0.085	-0.013	0.000	0.062						0.549
5	0.263	-0.084	-0.010	0.000	0.097	-0.010					0.620
6	0.100	-0.078	-0.012	0.000	0.107	-0.012	0.022				0.654
7	0.214	-0.073	-0.012	0.000	0.116	-0.013	0.024	-0.028			0.684
8	0.227	-0.084	-0.015	0.000	0.117	-0.012	0.024	-0.030	0.003		0.711
9	-0.262	-0.086	-0.016	0.000	0.125	-0.014	0.028	-0.039	0.004	0.094	0.733

In the step wise regression equation the variable ‘current ratio’ is included as the first variable and the contribution of this variable is found to be 18.4 per cent. In the second step the variable ‘return on equity’ is introduced. This variable along with current ratio shows 26.2 per cent variations in the capital structure. The contribution has increased by 8.8 per cent. GDP as a third variable has increased the contribution by 13.2 per cent. Age of the firm is the fourth variable that is introduced and it has increased the contribution from 39.4 per cent to 54.9 per cent. The contribution get further increased by 7.1 per cent to 62.0 per cent with the introduction of variable ‘dividend payout ratio’. Cost of equity as a sixth variable has increased the contribution by 3.4 per cent. Inflation is the seventh variable and it has increased the contribution from 65.4 per cent to 68.4 percent. Growth introduced as eighth variable and contribution has increased by 2.7 per cent. Bank rate has increased the contribution from 71.1 per cent to 73.3 per cent. The total contribution of

nine variables amounts to 73.3 per cent. The R^2 value of multiple regression amounts to 74.5 per cent. The difference of 1.2 per cent is due to the contribution of other variables.

To sum up, the variable return on equity is the predominant variable accounts for the variations in capital structure of large, mid and small cap companies.

5.2.10 CORRELATION ANALYSIS OF TRANSPORT INDUSTRY

Variables Associated with Capital Structure in Transport Industry under Large cap

The table 5.28 gives the details of selected variables associated with the capital structure of large cap companies in transport industry. The association is analysed using the correlation coefficient and coefficient of determination.

Table 5.28 : Variables Associated with Capital Structure - Transport Industry (Large cap)

Variables	r	r^2
Current Ratio	-0.267*	0.071
Interest Coverage Ratio	-0.298**	0.089
Profitability	-0.133	0.018
Size of the firm	0.165	0.027
Tax rate	0.050	0.002
Age of the firm	-0.196	0.038
Return on Equity	-0.006	0.000
Growth	0.071	0.005
Tangibility	0.492**	0.242
Non-debt Tax Shield	-0.065	0.004
Dividend Payout Ratio	-0.038	0.001
Cost of Debt	-0.002	0.000
Cost of Equity	-0.150	0.023
Inflation	-0.165	0.027
GDP	-0.113	0.013
Bank Rate	-0.007	0.000

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Out of sixteen variables selected, three variables are found to be significant. Interest coverage ratio and tangibility are found to be significant at one per cent level. Current ratio is found to be significant at five per cent level.

Current ratio

The correlation coefficient (-0.267) shows a negative relationship between current ratio and capital structure. This shows that decrease in liquid asset would increase the debt

level in the capital mix. The coefficient of determination (r^2) shows that current ratio shows 7.1 per cent of variation in the capital structure.

Interest coverage ratio

Interest coverage ratio (-0.298) and capital structure are negatively correlated. This shows that reduction in interest coverage ratio leads to increase in the debt level of capital mix. The coefficient of determination (r^2) reveals that 8.9 per cent of variation in capital structure.

Tangibility

The correlation coefficient of 0.492 shows a positive relationship between tangibility and capital structure. This shows that increase in size of assets leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that tangibility describes 24.2 per cent of variation in the capital structure.

Variables Associated with Capital Structure in Transport Industry under Mid cap

The table 5.29 gives the details of selected variables associated with the capital structure of mid cap companies in transport industry. The association is analysed using the correlation coefficient and coefficient of determination.

Table 5.29 : Variables Associated with Capital Structure - Transport Industry (Mid cap)

Variables	r	r^2
Current Ratio	-0.034	0.001
Interest Coverage Ratio	-0.409**	0.167
Profitability	-0.281*	0.079
Size of the firm	0.159	0.025
Tax rate	-0.279*	0.078
Age of the firm	-0.133	0.018
Return on Equity	-0.374**	0.140
Growth	0.047	0.002
Tangibility	0.131	0.017
Non-debt Tax Shield	0.008	0.000
Dividend Payout Ratio	-0.348**	0.121
Cost of Debt	-0.239*	0.057
Cost of Equity	-0.252*	0.064
Inflation	-0.154	0.024
GDP	-0.389**	0.151
Bank Rate	-0.300**	0.090

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Out of sixteen variables selected, nine variables are found to be significant. Interest coverage ratio, Return on equity, Dividend payout ratio, GDP and Bank rate are found to be significant at one per cent level. Profitability, Tax rate, Coat of debt and Cost of equity are found to be significant at five per cent level.

Interest coverage ratio

Interest coverage ratio (-0.409) and capital structure are negatively correlated. This shows that reduction in interest coverage ratio leads to increase in the debt level of capital mix. The coefficient of determination (r^2) reveals that 16.7 per cent of variation in capital structure.

Profitability

The correlation coefficient (-0.281) shows a negative relationship between profitability and capital structure. This shows that decrease in profitability would increase the debt level of capital mix. The coefficient of determination (r^2) shows that profitability shows 7.9 per cent of variation in the capital structure.

Tax rate

Tax rate (-0.279) have a negative association with capital structure. This shows that reduction in tax rate leads to increase in the debt level of capital mix. The coefficient of determination (r2) shows that tax provision accounts for 7.8 per cent of the variation in the capital structure.

Return on equity

Return on equity (-0.374) and capital structure are negatively correlated. This shows that the decrease in return on equity would increase the debt level of capital mix. The coefficient of determination (r2) shows that return on equity accounts for 14.0 per cent of the variation in the capital structure.

Dividend payout ratio

The correlation coefficient (-0.348) shows a negative relationship between dividend payout ratio and capital structure. This shows that decrease in dividend payout ratio would increase the debt level in the capital mix. The coefficient of determination (r^2) shows that dividend payout ratio accounts for 12.1 per cent of variation in the capital structure.

Cost of debt

Cost of Debt and capital structure are negatively correlated. The value of correlation coefficient is -0.239. This shows that reduction in cost of debt leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that cost of debt accounts for 5.7 per cent of the variation in the capital structure.

Cost of equity

Cost of equity and capital structure are negatively correlated. The value of correlation co efficient is -0.252. This indicates that reduction in cost of equity leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that 6.4 per cent of variation in capital structure due to the cost of equity.

GDP

The correlation coefficient (-0.389) shows a negative relationship between GDP and capital structure. It depicts that decrease in GDP leads to increase the debt level in the capital mix. The coefficient of determination (r^2) shows that GDP accounts for 15.1 per cent of the variation in the capital structure.

Bank rate

Bank rate (-0.300) shows a negative relationship with capital structure. It indicates that decline in bank rate shall increase the debt level of capital mix. The coefficient of determination (r^2) shows that bank rate accounts for 9.0 per cent of the variation in the capital structure.

Variables Associated with Capital Structure in Transport Industry under Small cap

The table 5.30 gives the details of selected variables associated with the capital structure of small cap companies in transport industry. The association is analysed using the correlation coefficient and coefficient of determination.

Out of sixteen variables selected, three variables are found to be significant. Age of the firm and Non debt tax shield are found to be significant at one per cent level. Profitability is found to be significant at five per cent level.

Table 5.30 : Variables Associated with Capital Structure - Transport Industry (Small cap)

Variables	r	r^2
Current Ratio	0.035	0.001
Interest Coverage Ratio	-0.201	0.040
Profitability	0.266*	0.071
Size of the firm	-0.108	0.012
Tax rate	-0.005	0.000
Age of the firm	-0.499**	0.249
Return on Equity	-0.005	0.000
Growth	0.131	0.017
Tangibility	-0.140	0.020
Non-debt Tax Shield	0.563**	0.317
Dividend Payout Ratio	-0.139	0.019
Cost of Debt	-0.119	0.014
Cost of Equity	-0.118	0.014
Inflation	0.166	0.028
GDP	0.054	0.003
Bank Rate	0.121	0.015

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Profitability

Profitability (0.266) have a significant association with capital structure. This positive association indicates that increase in profitability leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that profitability accounts for 7.1 per cent of the variation in the capital structure.

Age of the firm

Age of the firm (-0.499) and capital structure are negatively correlated. This shows that short run companies are with high level of debt in the capital mix. The coefficient of determination (r^2) shows that age accounts for 24.9 per cent of the variation in the capital structure.

Non-debt tax shield

Non-debt tax shield (0.563) and capital structure are positively correlated. This shows that increase in non-debt tax shield leads to increase in the debt level of capital mix. The coefficient of determination (r^2) shows that non-debt tax shield accounts for 31.7 per cent of the variation in the capital structure.

It conclude, it has been observed that the variable profitability have a significant relationship with capital structure in mid and small cap companies.

5.2.11 MULTIPLE REGRESSION OF TRANSPORT INDUSTRY

Determinants of Capital Structure in Transport Industry under Large cap

The table 5.31 shows the combined influence of the selected variables on the capital structure of large cap companies in transport industry.

Table 5.31 : Determinants of Capital Structure - Transport Industry (Large cap)

Variables	Regression coefficient	Standard error	T
Current Ratio	0.002	0.048	0.041
Interest Coverage Ratio	-0.024**	0.008	-3.178
Profitability	-0.038*	0.017	-2.219
Size of the firm	0.051	0.107	0.476
Tax rate	-0.971**	0.339	-2.866
Age of the firm	-0.010**	0.003	-3.059
Return on Equity	0.021**	0.007	2.893
Growth	0.000	0.002	-0.104
Tangibility	2.131**	0.267	7.972
Non-debt Tax Shield	-5.635	3.179	-1.773
Dividend Payout Ratio	0.002	0.002	0.859
Cost of Debt	0.017	0.013	1.269
Cost of Equity	-0.015	0.022	-0.660
Inflation	-0.035**	0.013	-2.685
GDP	0.000	0.000	-1.452
Bank Rate	0.041	0.045	0.912

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Constant : 0.647

Std. Error of Estimate : 0.543

$\overline{R}^2$: 0.653

R^2 : 0.728**

Out of the 16 variables introduced for regression analysis, only seven are found to have significant association with capital structure. They are, i) interest coverage ratio ii) profitability iii) Tax rate iv) age of the firm v) return on equity vi) tangibility and vii) inflation.

Interest coverage ratio

The regression coefficient indicates that interest coverage ratio negatively influences the capital structure and it is significant at one per cent level. The value of regression coefficient indicates that a unit of decrease in interest coverage ratio shall increase capital structure by 0.024 units. Reduction in interest coverage ratio leads to increase in capital structure.

Profitability

The regression indicates that profitability negatively influence the capital structure and it is significant at five per cent level. A unit of decrease in profitability leads to increase the capital structure by 0.038 unit. Decrease in profitability leads to higher level of capital structure.

Tax rate

The regression coefficient shows that Tax rate negatively influences the capital structure which is significant at one per cent level. The regression coefficient value depicts that a unit of decrease in Tax rate shall increase capital structure by 0.971 units. Lower tax rate leads to higher level of capital structure.

Age of the firm

Age of the firm shows a negative influence with capital structure and it is significant at one per cent level. The regression value depicts that a unit decrease in age of the firm leads to increase in capital structure by 0.010 unit. It is evident that the companies with least year of existence leads to higher level of capital structure.

Return on equity

Return on equity positively influences the capital structure which is significant at one per cent level. The regression coefficient value shows that a unit decrease in return on equity shall increase the capital structure by 0.021 unit. Reduction in return on equity leads to higher level of capital structure.

Tangibility

The regression coefficient indicates that tangibility positively influences the capital structure and it is significant at one per cent level. The value of regression coefficient indicates that a unit of increase in tangibility shall increase the capital structure by 2.131 units. Companies with high level of tangibility prefer debt financing to their capital structure.

Inflation

The regression coefficient indicates that inflation negatively influence the capital structure and it is significant at one per cent level. A unit of decrease in inflation shall increase the capital structure by 0.035 unit. Decline in inflation leads to higher level of capital structure.

The value of R^2 is found to be significant at one per cent level. This shows that the regression equation framed is a good fit. Around 72.80 per cent of variation in capital structure is due to the selected variables.

Determinants of Capital Structure in Transport Industry under Mid cap

The table 5.32 shows the combined influence of the selected variables on the capital structure of mid cap companies in transport industry.

Table 5.32 : Determinants of Capital Structure - Transport Industry (Mid cap)

Variables	Regression coefficient	Standard error	T
Current Ratio	-0.120*	0.054	-2.232
Interest Coverage Ratio	-0.059	0.058	-1.021
Profitability	0.066	0.034	1.927
Size of the firm	1.319**	0.475	2.776
Tax rate	-0.290	0.585	-0.495
Age of the firm	0.008	0.008	1.024
Return on Equity	-0.052**	0.011	-4.822
Growth	0.009**	0.003	2.986
Tangibility	0.535	0.588	0.911
Non-debt Tax Shield	-7.798	6.141	-1.270
Dividend Payout Ratio	-0.012*	0.005	-2.305
Cost of Debt	-0.021	0.044	-0.481
Cost of Equity	0.068	0.060	1.125
Inflation	-0.134**	0.034	-3.985
GDP	0.000**	0.000	-4.735
Bank Rate	0.119	0.121	0.984

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Constant	: -1.990
Std. Error of Estimate	: 2.067
R^2	: 0.605
R^2	: 0.690**

Out of the 16 variables introduced for regression analysis, seven are found to have significant association with capital structure. They are, i) current ratio ii) size of the firm iii) return on equity iv) growth v) dividend payout ratio vi) inflation and vii) GDP

Current ratio

The regression coefficient indicates that current ratio negatively influence the level of capital structure and it is significant at five per cent level. It is indicates that a unit of decrease in liquidity shall increase capital structure by 0.120 units. Decrease in Liquidity leads to higher level of capital structure.

Size of the firm

The regression coefficient indicates that Size of the firm positively influences the capital structure and it is significant at one per cent level. It depicts that a unit increase in size of firm shall increase the capital structure by 1.319 units. It is evident that large size companies are with higher level of capital structure.

Return on equity

The regression coefficient shows that return on equity negatively influences the capital structure and it is significant at one per cent level. It is indicates that a unit of decrease in return on equity shall increase the capital structure by 0.052 units. Reduction in return on equity leads to increase in debt level of capital structure.

Growth

The regression coefficient indicates that growth positively influences the capital structure which is significant at one per cent level. The value is indicates that a unit of increase in firm growth shall increase the capital structure by 0.009 units. Increase in growth leads to higher level of capital structure.

Dividend payout ratio

The regression coefficient between dividend payout ratio and capital structure is negatively significant at five per cent level. The regression coefficient value indicates that decrease in dividend payout ratio shall increase the capital structure by 0.012 units. Decrease in dividend payout ratio leads to higher level of capital structure.

Inflation

The regression coefficient indicates that the inflation negatively influence the capital structure and it is significant at one per cent level. A unit of decrease in inflation shall increase the capital structure by 0.134 units. Decline in inflation leads to higher level of capital structure.

GDP

The regression coefficient shows that GDP positively influences the capital structure which is significant at one per cent level. The value of regression coefficient

indicates that a unit of increase in GDP shall increase the capital structure by 0.000 units. Higher level of GDP leads to higher level of capital structure.

The value of R^2 is found to be significant at one per cent level. This shows that the regression equation framed is a good fit. Around 69.0 per cent of variation in capital structure is due to the selected variables.

Determinants of Capital Structure in Transport Industry under Small cap

The table below 5.33 the combined influence of the selected variables on the capital structure of small cap companies in transport industry.

Table 5.33 : Determinants of Capital Structure - Transport Industry (Small cap)

Variables	Regression coefficient	Standard error	T
Current Ratio	-0.183*	0.078	-2.353
Interest Coverage Ratio	-0.034	0.025	-1.368
Profitability	-0.005	0.021	-0.223
Size of the firm	-0.143	0.251	-0.569
Tax rate	0.707	0.471	1.499
Age of the firm	-0.041**	0.014	-2.936
Return on Equity	0.008	0.010	0.846
Growth	0.006*	0.003	2.201
Tangibility	-1.829**	0.440	-4.153
Non-debt Tax Shield	16.606**	5.492	3.024
Dividend Payout Ratio	0.003	0.004	0.801
Cost of Debt	0.016	0.039	0.400
Cost of Equity	-0.011	0.025	-0.443
Inflation	0.059*	0.022	2.659
GDP	0.000**	0.000	2.873
Bank Rate	-0.034	0.076	-0.450

Source: Computed * Significant at five per cent level ** Significant at one per cent level

Constant : 1.909

Std. Error of Estimate : 0.680

R^2 : 0.630

R^2 : 0.710**

Out of the 16 variables introduced for regression analysis, only seven are found to have significant association with capital structure. They are, i) current ratio ii) age of the firm iii) growth iv) tangibility v) non-debt tax shield vi) inflation and vii) GDP.

Current ratio

The regression coefficient indicates that current ratio negatively influence the level of capital structure. The value of regression coefficient indicates that a unit of decrease in liquidity shall increase capital structure by 0.183 units. Decrease in Liquidity leads to higher level of capital structure.

Age of the firm

Age of the firm shows a negative influence with capital structure and it is significant at one per cent level. The regression value depicts that a unit decrease in age of the firm leads to increase the capital structure by 0.041 unit. Companies with long year of existence leads to lower level of capital structure.

Growth

The regression coefficient indicates that growth positively influences the capital structure which is significant at five per cent level. The value indicates that a unit of increase in firm growth shall increase the capital structure by 0.006 units. Increase in growth leads to higher level of capital structure.

Tangibility

The regression coefficient indicates that tangibility negatively influences the capital structure. The value of regression coefficient indicates that a unit of decrease in tangibility shall increase the capital structure by 1.829 units. Lower level of fixed assets leads to higher level of capital structure.

Non-debt tax shield

Non-debt tax shield shows a positive influence with capital structure and it is significant at one per cent level. The regression value depicts that a unit increase in non-debt tax shield shall increase the capital structure by 16.606 unit. Increase in non-debt tax shield leads to higher level of capital structure

Inflation

The regression coefficient indicates that inflation positively influences the capital structure which is significant at five per cent level. The value indicates that a unit of increase in inflation shall increase the capital structure by 0.059 units. Increase in inflation leads to higher level of capital structure.

GDP

The regression coefficient indicates that GDP positively influences the capital structure which is significant at one per cent level. The value indicates that a unit of increase in GDP shall increase the capital structure by 0.000 units. Increase in GDP leads to higher level of capital structure.

The value of R^2 is found to be significant at one per cent level. This shows that the regression equation framed is a good fit. Around 71.0 per cent of variation in level of capital structure is due to the selected variables.

It is observed form the above that the variable inflation have more a significance with capital structure than the other variables.

5.2.12 STEP- WISE REGRESSION OF TRANSPORT INDUSTRY

Variables Prominently Associated with Capital Structure in Transport Industry under Large cap

To find out the prominent variables that account for the variations in capital structure, step-wise regression has been carried out. The variables namely tangibility, non debt tax shield, age of the firm, interest coverage ratio, tax rate and inflation are the prominent variables that accounts for the variation in capital structure.

Table 5.34 : Variables Prominently Associated with Capital Structure - Transport Industry (Large cap)

Step	Constant	TANG	NDTS	Age of the firm	ICR	Tax	Inflation	R^2
1	0.129	1.307						0.242
2	0.260	1.798	-9.518					0.358
3	0.450	1.919	-9.128	-0.007				0.435
4	0.608	1.817	-6.699	-0.009	-0.020			0.516
5	0.849	2.074	-6.285	-0.014	-0.026	-1.166		0.609
6	1.178	2.114	-7.179	-0.015	-0.026	-1.387	-0.037	0.661

In the step wise regression equation the variable ‘tangibility’ is included as the first variable and the contribution of this variable is found to be 24.2 per cent. In the second step the variable ‘non-debt tax shield’ is introduced. This variable along with tangibility shows 35.8 per cent variations in the capital structure. The contribution has increased by 11.6 per cent. Age of the firm as a third variable has increased the contribution by 7.7 per cent. Interest

coverage ratio is the fourth variable that is introduced and it has increased the contribution from 43.5 per cent to 51.6 per cent. The contribution get further increased by 9.3 per cent to 60.9 per cent with the introduction of variable 'tax rate'. Inflation as the sixth variable has increased the contribution from 60.9 per cent to 66.1 per cent. The total contribution of six variables amounts to 66.1 per cent. The R^2 value of multiple regression amounts to 72.8 per cent. The difference of 6.7 per cent is due to the contribution of other variables.

Variables Prominently Associated with Capital Structure in Transport Industry under Mid cap

To find out the prominent variables that account for the variations in capital structure, step-wise regression has been carried out. The variables namely interest coverage ratio, GDP, return on equity and growth are the prominent variables that accounts for the variation in capital structure.

Table 5.35 : Variables Prominently Associated with Capital Structure - Transport Industry (Mid cap)

Step	Constant	ICR	GDP	ROE	Growth	R^2
1	1.634	-0.123				0.167
2	2.513	-0.111	0.000			0.286
3	2.738	-0.056	0.000	-0.023		0.376
4	2.559	-0.042	0.000	-0.040	0.010	0.465

In step wise regression, the variable 'interest coverage ratio' has been introduced in the first step. This variable contributes 16.7 per cent to the variation in capital structure. GDP is the second variable that is introduced in step two. It has increased the contribution by 17.9 per cent. Return on equity a third variable has increased the contribution from 28.6 per cent to 37.6 per cent. The contribution get further increased by 8.9 per cent to 46.5 per cent, with the introduction of variable 'growth'. The total contribution of four variables namely ICR, GDP, return on equity and Growth amounts to 46.50 per cent. The difference of 13.50 per cent is due to the contribution of other variables.

Variables Prominently Associated with Capital Structure in Transport Industry under Small cap

To find out the prominent variables that account for the variations in capital structure, step-wise regression has been carried out. The variables namely non debt tax shield, tangibility, age of the firm, GDP, inflation, current ratio, growth and tax rate are the prominent variables that accounts for the variation in capital structure.

Table 5.36 : Variables Prominently Associated with Capital Structure - Transport Industry (Small cap)

Step	Constant	NDTS	TANG	Age of the firm	GDP	Inflation	CR	Growth	Tax	R^2
1	0.181	20.340								0.317
2	0.617	22.229	-1.101							0.383
3	1.863	14.350	-1.463	-0.026						0.456
4	1.787	12.736	-1.631	-0.035	0.000					0.523
5	1.561	11.033	-1.920	-0.041	0.000	0.069				0.591
6	2.094	11.617	-2.137	-0.044	0.000	0.069	-0.182			0.621
7	1.823	14.616	-2.130	-0.040	0.000	0.059	-0.215	0.006		0.659
8	1.467	15.002	-2.092	-0.041	0.000	0.065	-0.176	0.007	0.718	0.683

From the above table in the step wise regression equation the variable 'non-debt tax shield' is included as the first variable and the contribution of this variable is found to be 31.7 per cent. In the second step the variable 'tangibility' is introduced. This variable along with non-debt tax shield shows 38.3 per cent variations in the capital structure. Age of the firm as a third variable has increased the contribution by 7.3 per cent. GDP is the fourth variable that is introduced and it has increased the contribution from 45.6 per cent to 52.3 per cent. The contribution get further increased by 6.8 per cent to 59.1 per cent with the introduction of variable 'inflation'. Current ratio as the sixth variable which has increased the contribution from 59.1 per cent to 62.1 per cent. Growth is the seventh variable has increased the contribution from 62.1 per cent to 65.9 per cent. Tax Rate is the eighth variable and the contribution is found to be 2.4 per cent. The total contribution of eight variables amounts to 68.3 per cent. The R^2 value of multiple regression amounts to 71.0 per cent. The difference of 2.7 per cent is due to the contribution of other variables.

5.3 CONCLUSION

From the analysis it is concluded that in healthcare industry tangibility, non- debt tax shield, tax rate and size of the firm are the most significant variables in deciding the capital structure of all capitalisation level of companies. In the hotel industry size of the firm, profitability, tax rate, GDP and non- debt tax shield seem to have gained significantly in determining the capital structure. Variables namely profitability, tax rate, current ratio, size of the firm and return on equity are highly influencing the capital structure of the software industry. In transport industry tangibility, interest coverage ratio, GDP, tax rate, age of the firm along with non- debt tax shield have decided the capital structure of the select companies.