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A study of Capital Structure and Profitability: with reference to top listed Indian IT Companies

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Abstract

The purpose of this study is to examine the relationship between capital structure and firm's profitability. This study focuses on IT companies and 5 top listed IT companies are taken as sample. The period of the study is six years and is wholly based on secondary data which has been collected through Business Standard Data base. In order to attain the objectives of the study, analysis of various ratios are employed by the researchers. Based on correlation coefficient, study establishes a significant negative relationship between profitability and capital structure which implies that companies with higher proportion of debt tend to have low profitability.

Keywords: Capital Structure, Return on Capital Employed, Gross Profit.

Introduction

IT industry being one of the fast growing industries of the world with the capacity of providing employment opportunities to large number of people, occupies the predominant place as one of the basic industry for growth and development. This sector plays a very important role in the development of Indian economy. The IT sector has been significantly contributing to Indian economic growth; its contribution in providing employment and its share of GDP have been on the rise. Indian IT industry has shown a growth of 11% in Financial Year 2021. India is now being recognized as powerhouse for incremental development of computer software. It has grown to USD 194 billion industries from USD 58.4 billion industry in financial year 2020-21 by employing over 4 million people. Core competencies and strengths of Indian IT sector have attracted considerable investment from major countries. As per the data released by Department for Promotion of Industry and Internal Trade (DPIIT) the sector has ranked second in FDI inflow

As the improvement in the profitability is necessary for the long-term survivability of the firm, so the relationship between capital structure and profitability cannot be ignored. As the interest payment on debt is tax deductible, therefore the addition of debt in the capital structure will improve the profitability of the firm. Thus, to make sound capital structure decision, it is important to analyse the relationship between capital structure and the profitability of the firm.

Review Literature:

Velnampy, T. and Niresh, J.A. (2012) in his research studies the relationship between debt and taxes in finance theory in order to investigate financing practices across firms in the forest products industry. In testing the relationship between taxes and capital structure, the study discover a negative relationship between debt and profitability, a positive relationship between debt non-debt tax shields, and a negative relationship between firm size and debt.

Velnampy,T. and Nimalathasan, B. (2014) advocated the relationship between capital structure and profitability of listed firms on the Ghana Stock Exchange. He found positive relationship between short-term debt to total assets ratio and Return on equity and negative relationship between the ratio of long-term debt to total assets and ROE.

Ozkan and Ozkan (2015) extended his views regarding the effect of capital structure on profitability. A sample of 272 American firms listed on New York Stock Exchange for a period of 3 years from was selected. To measure the relationship between profitability and capital structure, correlation and regression were used. Empirical results show a positive relationship between short-term debt to total assets ratio and profitability and also between total debt to total assets and profitability ratio in the service industry.

Eljelly (2017) examined the dynamics of profitability investigating the persistence of profits in UK manufacturing and service sector firms. He analyzed a constantly negative relationship between size and profitability, gearing and profitability and positive relationship between liquidity and profitability.

Research Gap:

Most of studies have been done in other part of the world but only some studies have taken place in India with reference to IT industries. Most of the earlier studies have tried to establish the relationship between capital structure and profitability by taking into consideration only the short term funds and long term funds. In the present research, an effort has been made to take various other variables like Debt- equity ratio, Net profit ratio, Gross Profit ratio, etc. to establish a relationship between Capital structure and Profitability. Debt to total fund ratio gives a wider view to debt and equity mix as it compares the amount of debt with total funds available in business. Thus the present study tries to eliminate the above problems by taking into consideration various other variables.

Objectives

- To analyze the profitability of listed IT companies.
- Determine the relationships between capital structure and financial performance of selected listed IT firms.

Hypothesis

H0: There is no significant relationship between the capital structure and profitability of select firms.

H1: There is significant relationship between the capital structure and profitability of select firms.

Results and Discussion:

In order to meet the objective of study, the Profitability Ratios are calculated with the help of "mean" technique. Thus the "mean" of profitability is used as independent variable and capital structure ratios (viz., Debt to assets ratio, Debt to Equity ratio, Interest coverage ratio) are taken as dependent variables. In desire to derive the result, Correlation analysis is performed between different variables of Profitability and Capital structure.

Table 1: Debt Equity ratio

(Figures in times)

Company	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	Mean	Standard Deviation
Tata consultancy services	0	0	0	0	0	0	.00	.00
Infosys	0	0	0	0	0	0	.00	.00
HCL technologies	0	0	0	0	0	0.02	.0030	.086
Wipro Limited	.15	0.12	0.14	0.15	0.17	0.17	.1500	.100
Redigton India Limited	.49	0.48	0.45	0.38	0.26	0.24	.3833	.100

Source: Annual report of companies.

Table 1, shows that Debt composition in the capital structure is relatively low as compared to equity in most of the companies. Among the above selected IT companies the ratio of Redigton India Limited is comparatively higher with a mean of .3833 which shows the aggression of the company in financing its growth with debt. On the other side, Tata Consultancy Services and Infosys Ltd. with a mean value of 0.00 indicate the company's intention to keep the control with them.

In addition, these companies also show low standard deviation as compared to other companies during the period of study. Considering the above results, Wipro Limited is showing highest standard deviation of 0.10074 in comparison to the other companies which indicate high earning volatility of the company.

Table 2: Interest Coverage Ratio

(Figures in times)

Company	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	Mean	Standard Deviation
Tata consultancy services	345.46	240.44	1065.37	1880.13	2257.85	309.53	1016.46	876.53
Infosys	0	0	0	0	0	2100.75	350.125	857.63

HCL technologies	520.73	621.69	397.74	151.47	127.18	127.95	324.46	357.40
Wipro Limited	21.3	19.8	27.11	23.84	20.27	30.09	23.735	4.128
Redigton India Limited	2.46	2.58	3.68	4.66	4.31	4.92	3.77	1.109

Source: Annual report of companies.

The above Table 2, shows that Tata Consultancy Services, Infosys Ltd. and HCL Technologies is showing high interest coverage ratio with a mean value of 1016.46, 350.125 and 324.46 which indicates a better financial health of the company as the company has enough profit available to service its debt. On the other hand, Wipro Limited and Redigton India limited are having low interest coverage ratio with a mean of 23.735 and 3.77 indicating high burden of financial charges on the companies. Furthermore, it also means that these companies are having low amount of profits available to meet its debt expenses. On the other hand, high standard deviation values of Tata Consultancy Services and Infosys Ltd. and HCL Technologies i.e. 876.53, 857.63 and 357.4 , indicate huge fluctuation in the rate beard by the companies while making the payment of interest on its debt. While the low standard deviation values of Wipro limited and Redigton India limited (4.128 and 1.1.93) indicates a consistency in rate of interest on debt beard by them.

Table 3: Debt Asset Ratio

(Figures in times)

Company	**2019-20**	**2018-19**	**2017-18**	**2016-17**	**2015-16**	**2014-15**	**Mean**	**Standard Deviation**
Tata consultancy services	1.8	1.71	1.64	1.17	1.3	2.41	1.671	.398
Infosys	.39	0.38	0.33	0.12	0.1	0.062	.2303	.145
HCL technologies	2	2.1	2.05	1.88	2.68	2.62	2.222	.360
Wipro Limited	13.2	11.72	14.3	14.05	16.39	15.6	14.21	1.782
Redington India Limited	33.3	34.58	31.59	30.75	23.92	17.63	28.63	6.845

Source: Annual report of companies.

The Table 3 depicts that many companies are financing their assets by using more of debts. Companies are having more proportion of debt in their capital structure as compare to equity. As shown in the table, it can be seen that Infosys Ltd. is having less proportion of debt as compared to equity in financing their asstes. Infosys is having debt with the mean of 0.2303 representing that the company finance most of its assets by equity. On the other hand Redington India Limited with an average of 28.63 is using high debt than equity in financing their capital which shows that the company is highly leveraged one. Considering the Infosys Ltd. and HCL Technologies, their standard deviation is 0.14554 and 0.36053 respectively which implies that these companies have been using debt and equities in relatively same proportion over the last six years and also taken in consideration Redigton India Limited and Wipro Limited with an high standard deviation 6.84584 and 1.78285 respectively which shows that these companies are using debt and equity in different proportions in different years.

Table 4: Gross Profit Ratio

(Figures in times)

Company	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	Mean	Standard Deviation
Tata consultancy services	34.13	34.44	34.48	34.13	35.87	35.23	34.71	.708
Infosys	28.16	29.44	34.41	34.18	34.67	37.44	33.05	2.884
HCL technologies	44.05	43.08	45.38	45.31	45.09	46.63	44.92	1.279
Wipro Limited	23.13	22.45	24.71	25.48	25.67	27.5	24.82	1.829
Redington India Limited	1.51	1.41	1.92	2.06	2.39	2.36	1.94	.398

Source: Annual report of companies.

From the table 4, with highest gross profit ratio, it is clear that HCL Technologies, Tata Consultancy Services and Infosys Ltd. are efficient in producing their products and have sufficient resources to bear the cost necessary to run the business. However, taking into consideration the companies like Wipro Limited and Redington India Limited have low gross profit ratio compare to other companies under study with the mean of 24.82 and 1.94 respectively representing the inefficiency of the companies in producing their products. High values of standard deviation of the companies under study that is Infosys, HCL Technologies and Wipro Limited, indicate high volatility in companies profit while companies like Tata consultancy services and Redington India Limited are having low standard deviation value i.e. .7082 and .3987 as compared to other companies in the study which indicates that these companies are experiencing average gross profit.

Table 5: Net Profit Ratio

(Figures in times)

Company	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	Mean	Standard Deviation
Tata consultancy services	25.1	24.41	25.93	25.52	26.87	26.17	25.670	.909
Infosys	22.12	20.11	26.08	23.31	23.51	25.72	23.48	2.388
HCL technologies	32.34	31.47	33.35	35.58	35.13	37	34.145	2.139
Wipro Limited	16.21	15.82	17.27	17.72	18.35	19.88	17.47	1.486
Redington India Limited	1.2	0.9	1.24	1.32	1.53	1.51	1.83	.255

Source: Annual report of companies.

From the Table 5, it is clear that HCL Technologies, Tata Consultancy services and Infosys showing high net profit ratio with the mean of 34.145, 26.670 and 23.48 respectively indicates that these companies are in better position to cope up market challenges like competition, price etc., and also analyze that these companies enjoy high profitability. Other companies like Wipro Limited and Redington India limited, having minimum net profit ratio with the mean of 17.47 and 1.83, shows that these companies are not in a better financial position to stand with respect to other companies with prevailing economic conditions because of its low profitability. Infosys and HCL technologies enjoy highest standard deviation of 2.38802 and 2.13989 respectively indicating the fluctuation in the net profits, while companies like Tata Consultancy Services, Wipro Limited and Redington India Limited, are the companies with lowest standard deviation of .90929, 1.48629 and .25544 , showing the companies comparative advantage in stability of net profit.

Table 6: Return on Capital Employed Ratio

(Figures in times)

Company	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	Mean	Standard Deviation
Tata consultancy services	42.4	52.14	41.19	41.71	52.25	53.73	47.23	6.030
Infosys	30.1	31.46	30.21	29.31	32.22	37.12	31.73	2.588
HCL technologies	33.6	33.58	33.5	34.31	36.98	42.01	35.66	3.085

Wipro Limited	20.3	19.75	20.1	21.52	24.67	29	22.56	3.3181
Redington India Limited	15.1	14.97	15.54	18.34	20.24	20.85	17.51	2.430

Source: Annual report of companies.

From the Table 6 shows that Tata Consultancy Services, HCL Technologies and Infosys Ltd. are showing the maximum return on their capital employed with the mean of 47.23, 35.66 and 31.73 respectively indicating the efficient and economical utilization of the invested capital by these companies. These companies are obtaining a satisfactory return on their capital over the period of study. On the other hand, the companies like Wipro Limited and Redington India Limited are earning less return on their invested capital over the period of study with the mean of 22.56 and 17.51 indicating the weakness of the company to earn returns on its capital employed. Taking into consideration the standard deviation of the companies under study, the companies with highest standard deviation are Tata Consultancy Services and Wipro Limited indicating the fluctuation in earnings on their capital invested.

Table 7: Return on Net worth Ratio

(Figures in times)

Company	**2019-20**	**2018-19**	**2017-18**	**2016-17**	**2015-16**	**2014-15**	**Mean**	**Standard Deviation**
Tata consultancy services	32.8	38.91	32.92	33.21	41.81	43.05	37.1167	4.319
Infosys	24.1	23.3	24.57	21.41	23.26	26.98	23.9367	1.680
HCL technologies	27.3	28.22	27.5	28.96	30.77	36.1	29.8083	3.037
Wipro Limited	17.1	16.61	17.36	18.56	21.62	25.61	19.4766	3.198
Redington India Limited	8.5	9.24	11.15	13.24	13.02	13.85	11.5	2.044

Source: Annual report of companies.

Above Table shows HCL Technologies, Infosys Ltd. and Tata Consultancy Services are having highest Net worth ratio with the mean of 29.8083, 23.9367 and 37.1167 , showing that these companies are earning high profit and shareholders are enjoying high returns on their investments. Whereas, companies like Wipro limited and Redington India Limited are having low Return on Net worth ratio implying that these companies are lacking efficiency of the shareholders' capital to generate profit. Standard deviation of the companies like Tata Consultancy Services, HCL

Technologies and Wipro Limited are having maximum value of 4.31963, 3.03788 and 3.19891 respectively showing high fluctuation in their returns to shareholders. However Infosys and Redington India Limited is with the low standard deviation of 1.68012 and 2.04493 compared to other companies, implying that the shareholders earnings are exposed to less fluctuation.

Table 8: Operating Profit Ratio

(Figures in times)

Company	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	Mean	Standard Deviation
Tata consultancy services	33.67	34.58	34.52	34.15	35.88	35.37	34.695	0.736
Infosys	30.3	29.44	34.41	34.19	34.67	37.46	33.411	2.739
HCL technologies	42.45	43.15	45.49	45.6	45.44	46.98	44.851	1.554
Wipro Limited	24.58	23.54	25.57	26.5	26.9	28.39	25.913	1.580
Redington India Limited	2.1	2.26	2.6	2.6	3.1	2.94	2.6	0.349

Source: Annual report of companies.

Above table indicates that HCL Technologies, Infosys Ltd. and Tata Consultancy Services are showing highest operating profit ratio with the mean of 44.85166, 33.41166 and 34.695, representing much efficiency in operations by these companies. On the other hand, companies like Wipro Limited and Redington India Limited are having lowest operating ratio indicating lack of efficiency in their operations. Taking into consideration the standard deviation of the companies , as shown in the table, companies like Infosys Ltd., HCL Technologies and Wipro Limited are having maximum standard deviation of 2.73957, 1.5549 and 1.58008 respectively indicates high fluctuations in their operating profit. However Tata Consultancy services and Redington India Limited is with the lowest standard deviation of .73613 and .349094 indicates that the company's earnings are exposed to less fluctuation.

Table 9: Correlations

		ICR	DE	DA	PROFITABILITY
ICR	Pearson Correlation	1	-.377	-.399*	.417*
	Sig. (2-tailed)		.063	.048	.038
	N	25	25	25	25

DE	Pearson Correlation	-.377	1	.990**	-.911**
	Sig. (2-tailed)	.063		.000	.000
	N	25	25	25	25
DA	Pearson Correlation	-.399*	.990**	1	-.904**
	Sig. (2-tailed)	.048	.000		.000
	N	25	25	25	25
Profitability	Pearson Correlation	.417*	-.911**	-.904**	1
	Sig. (2-tailed)	.038	.000	.000	
	N	25	25	25	25

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The above table, indicate a negative correlation between debt to equity ratio and debt to asset with profitability of the selected firms. On the other side, the result indicates a significant association of interest coverage ratio with the profitability of the companies under study.

Negative correlation of Debt equity ratio and Debt asset ratio with profitability indicates that aggressive increase of debt content will adversely impact the profitability. Furthermore, the companies are exposing themselves to more risk.

Positive and significant correlation of Interest coverage ratio with the profitability ratio indicates a positive impact on profitability ratios, thus resulting a significant contribution to the profitability of the companies. Thus with above analysis it has been observed that the capital structure and profitability is having a negative correlation, hence resulting in rejection of null hypothesis.

Conclusion:

Today firms in Information Technology Industries conduct their business in a very difficult and aggressive industry environment. Several monetary problems persist and will forever be there and to survive in this dynamic environment, they have to prepare themselves to handle these challenges. With this it can be analyzed that for staying fit and maintaining profitability in this complex business world having an optimum capital structure is one of the most important among pre-requisites of company. In order to examine the profitability and capital structure of 5 listed IT companies in India during the period from 2014 to 2019, the study indicates that the firm fails to enjoy the benefits of leverage properly due to unsound debt-equity composition in their capital structure. IT companies should highlights on increasing the debt component in their capital structure, so that the company can enjoy the benefit of leverage and can have positive impact on its profitability. Management should also focus on various internal factors like, HR policies, marketing policies etc., so that the fluctuation in the profit can be reduced to some extent.

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