



## Capital Structure and its Impact on Profitability in Select Software Companies in South India

### KEYWORDS

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### ABSTRACT

Capital structure refers to the mix of various components in the capital of a company. The present paper is an attempt to study capital structure and its impact on profitability in select software companies in South India. In South India there are 20 software companies that are listed in Bombay Stock exchange. Out of these 10 companies were purposively chosen to study the capital structure of the individual companies and its impact on profitability of the said companies. The companies selected are hexaware technologies ltd, micro technologies (india) ltd, kpit cummins infosystems limited, zensar tech, infotech enterprises ltd, cmc ltd, wipro ltd, tata elxsi, polaris lab ltd, and financial technologies (india) ltd for a period of ten years from 2002 to 2011. In the above companies the components of debt, equity and the percentage composition of debt in total equity is analyzed. Profitability is measured by taking debt as a per centage of equity, Profit before tax as a per centage of capital employed and profit after tax as a per centage of capital employed. Interest as a percentage of gross profit and interest as a per centage of total income is further calculated for better analysis.

### 1. INTRODUCTION

Software is the collection of computer programs and related data that provide the instructions to a computer what to do and how to do it. At present, the software industry in India is worth Rs. 63.1 billion. India's software and services exports are seen rising 16-18% in the year to March 2012. As per NASSCOM, the Indian IT exports are anticipated to attain US\$ 175 billion by 2020 out of which the domestic sector will account for US\$ 50 billion in earnings. The Indian IT & ITeS industry, by 2020, is expected to create direct employment of 10 million and indirect employment of about 40 million. It is expected that the Indian IT and ITES Industry would record about US \$ 220 billion in exports and US \$ 60 billion domestically by 2022, totaling to \$ 260 billion growing at a CAGR of 12.8%. Based on the importance of the sector it is necessary to study the performance of software units in India. To assess the performance of the companies listed in BSE and whose registered office is situated in South India were chosen for the study. In South India there are 20 software companies that are listed in Bombay Stock exchange. Out of these 10 companies were purposively chosen to study the capital structure of the individual companies and its impact on profitability of the said companies. The companies selected are . HEXAware technologies ltd, micro technologies (india) ltd, kpit cummins infosystems limited, zensar tech, infotech enterprises ltd, cmc ltd, wipro ltd, tata elxsi, polaris lab ltd, and financial technologies (india) ltd for a period of ten years from 2002 to 2011. the financial performance can be measured through various ratios. The present paper attempts to study the effect of capital structure on profitability in these companies.

#### 1.1 CAPITAL STRUCTURE:

Capital Structure refers to the mix of various components of Capital of a Company. Estimation of requirement of capital is necessary, but the formation of capital structure is most important<sup>1</sup>. The term capital structure is used to represent the proportionate relationship between debt and equity<sup>2</sup>. Determination of optimal capital structure is an important task in financial management<sup>3</sup>. Capital structure decisions are important to maximize the earnings of the companies. The factors influencing the capital structure decision are: (i) Financial leverage or "trading on equity" (ii) Growth and stability of sales (iii) Cost of capital (iv) Cash flow ability to service debt (v) Nature and size of a firm (vi) Control (vii) Flexibility (viii) Cost of floatation (ix) Capital market conditions (x) Marketability and (xi) Government policy. The structural composition of the capital of a company organization will have an impact on its profit earning capacity. Capital structure decisions are

taken by considering the factors like profitably, solvency and control. The relationship between debt, equity and profitability is examined and an attempt is made to understand this relationship among them.

#### 1.2 CAPITAL STRUCTURE IN SOFTWARE INDUSTRY IN SOUTH INDIA

Debt as a percentage of equity is presented in Table 1.1. For this purpose debt is taken as long term loans from financial institutions such as secured and unsecured loans. Equity comprises paid up capital and all reserves.

Table 1.1 shows that debt as a percentage of equity of select software companies in south India increased from 3.06 per cent in 2001-02 to 35.26 per cent in 2008-09 and then decreased to 23.57 per cent in 2010-11. The average debt, total equity and debt as a percentage of equity stood at Rs. 2800 crores, Rs. 13145.91 crores and 14.45 per cent respectively. The compound growth rate of debt, total equity and debt as a percentage of equity stood at 75.97, 27.73 and 37.77 per cent. The 't' value for debt, equity and debt as a percentage of equity are 8.43, 37.71 and 4.97 which are significant at 5 % level.

**TABLE 1.1**  
**RELATIONSHIP BETWEEN DEBT AND EQUITY IN SELECT SOFTWARE COMPANIES IN SOUTH INDIA DURING 2002-2011.** (Rs. in Crores)

YEAR	DEBT	TOTAL EQUITY	DEBT AS % OF EQUITY
2001-02	106.70	3489.85	3.06
2002-03	144.11	4595.64	3.14
2003-04	211.56	5096.40	4.15
2004-05	206.88	7008.03	2.95
2005-06	260.87	9228.93	2.83
2006-07	1082.32	12529.11	8.64
2007-08	5276.84	16378.64	32.22
2008-09	6710.12	19032.95	35.26
2009-10	7042.33	24575.55	28.66
2010-11	6958.25	29524.00	23.57
Average	2800.00	13145.91	14.45
CGR	75.97	27.73	37.77
't'	8.43*	37.71*	4.97*

\*Significant at 5 % level.

Source: Annual reports of Selected companies.

The per centage composition of Debt and Equity in select Software Companies Units is presented in Table 1.2

**TABLE 1.2**  
**COMPONENTS OF DEBT AND EQUITY IN SELECT SOFTWARE COMPANIES IN SOUTH INDIA DURING 2002-2011.**  
(Fig in per centages)

YEAR	Equity share capital	Reserves and Surplus	Total Equity	Secured Loans	Unsecured Loans	Total Debt
2001-02	5.76	91.27	97.03	2.34	0.63	2.97
2002-03	4.21	92.75	96.96	1.79	1.25	3.04
2003-04	4.23	91.79	96.01	2.85	1.14	3.99
2004-05	4.60	92.66	97.26	1.41	1.46	2.87
2005-06	7.81	90.59	98.40	2.25	0.53	2.78
2006-07	4.49	88.30	92.79	3.06	4.95	8.02
2007-08	2.83	72.85	75.67	2.35	22.03	24.38
2008-09	2.03	71.95	73.99	2.47	23.61	26.08
2009-10	1.68	75.88	77.79	1.47	20.82	22.29
2010-11	2.19	78.77	80.96	2.25	16.83	19.08
AVG	3.98	84.68	88.69	2.22	9.33	11.55

Source: Compiled from annual reports.

During 2001-02, the percentage of total equity to the capital structure stood at 97.03 per cent. The share of total equity as percentage to the total capital slowly decreased to 80.96 per cent in 2010-11. The percentage of total debt to the capital structure increased from 2.97 per cent in 2001-02 to 26.08 per cent in 2008-09, thereafter decreased to 19.08 per cent in 2010-11. The average share of equity capital and debt for the study period stood at 88.69 per cent and 11.55 per cent. During the period of study the share of equity capital decreased slowly. It decreased from 5.76 to 2.19 per cent in 2010-11. The share of internal funds decreased slightly from 91.27 per cent in 2001 to 78.77 per cent in 2010-11. The share of secured loans varies between 1.41 and 3.06 per cent. The share of unsecured loans increased from 0.63 per cent to 23.61 per cent thereafter decreased 16.83 per cent. The share of total debt in the capital structure increased from 2.97 per cent to 26.08 per cent thereafter decreased to 19.08 per cent. Therefore, it can be concluded that software companies in south India utilized internal sources of funds and slowly increasing their debt content to maximize the profits.

### 1.3 DEBT - EQUITY RATIO IMPACT ON PROFITABILITY

The owners and management of a firm, inter alia, are interested in its financial soundness. The owners invest their funds in the firm with an expectation of at least a reasonable return, if not high returns. Similarly, management of a firm naturally shows interest in improving its operating efficiency. The operating efficiency of the firm and reasonable rate of return on owner's capital ultimately depend on the profit earned by it. So, the crucial importance of profits of a firm need not be over stressed. Profits are necessary to run the firm in a healthy atmosphere and to defend it from rival business firms etc. The structural composition of the capital of a company organization will have an impact on its profit earning capacity. An attempt is made here to find out how far this is true with reference to the sample Software companies. The relationship between debt, equity and profitability is examined and an attempt is made to understand this relationship. The relationship between Debt-Equity ratio and profitability of Software companies in South India is presented in Table 1.3.

**TABLE 1.3**  
**DEBT - EQUITY AND PROFITABILITY OF SOFTWARE COMPANIES IN SOUTH INDIA**(Figures represent percentages)

Year	Debt as % of equity	PBT as % of capital employed	PAT as % of capital employed
2001-02	3.06	27.10	24.15
2002-03	3.14	22.98	19.99
2003-04	4.15	24.51	24.03
2004-05	2.95	27.94	26.70
2005-06	2.83	27.81	26.45
2006-07	8.64	29.72	25.68
2007-08	32.22	25.49	21.44
2008-09	35.26	22.11	18.72
2009-10	28.66	21.36	17.64
2010-11	23.57	20.10	16.95
Average	14.45	24.91	22.17

Source : Compiled from the annual reports of sample companies.

Table 1.3 shows that debt as a percentage to equity in select Software companies in South India increased from 3.06 per cent to 35.29 per cent and thereafter decreased to 23.58 per cent. The average debt as a percentage of equity stood at 14.45 per cent. On the other hand, the PBT as percentage of capital employed increased from 27.10 per cent to 29.72 per cent in 2006-07 and then decreased to 20.10 per cent in 2010-11. The average PBT as a percentage of capital employed stood at 24.91 per cent for the study period. Percentage of PAT to capital employed increased from 24.15 per cent to 26.45 per cent in 2005-06 and then decreased to 16.95 per cent in 2010-11. The average PAT as a percentage of capital employed stood at 22.17 per cent for the period. The average percentage of PBT and PAT to capital employed, for the whole period of study i.e., 2002-2011, stood at 24.91 and 22.17 respectively. Therefore, the profitability of the Software companies in South India has slightly decreased during the study period due to the increase of debt content in the capital structure.

### 1.4 IMPACT OF PROFITABILITY

Capital structure and its impact on profitability can be examined by interest as percentage of gross profit and total income. It is presented in Table 1.4.

**TABLE 1.4**  
**CAPITAL STRUCTURE AND ITS IMPACT ON PROFITABILITY OF SOFTWARE COMPANIES IN SOUTH INDIA DURING 2002-2011.**(Rs. in Crores)

Year	Interest	Gross Profit	Total Income (Sales + other incomes)	Interest as a % of gross profit	Interest as a % of Total income
2001-02	10.02	1175.20	5370.02	0.85	0.19
2002-03	11.36	1314.69	6613.90	0.86	0.17
2003-04	11.61	1596.33	8774.09	0.73	0.13
2004-05	14.53	2371.46	11804.67	0.61	0.12
2005-06	16.18	3053.88	15167.38	0.53	0.11
2006-07	35.35	4171.68	23247.94	0.85	0.15
2007-08	211.60	5758.48	26665.43	3.67	0.79
2008-09	272.72	6245.25	33296.28	4.37	0.82
2009-10	154.97	6989.50	35104.44	2.22	0.44
2010-11	118.85	7730.10	41423.55	1.54	0.29
Average	85.72	4040.66	20746.77	2.12	0.32
CGR	48.42	26.24	27.13	17.57	16.74
't' Value	5.42*	16.20*	18.10*	2.16*	2.44*

Source : Compiled from the annual reports of sample companies.

\* Significant at 5 % level;

It is evident from Table 1.4 that the interest as percentage of gross profit was 0.85 per cent in 2001-2002. It increased to 1.54 per cent in 2010-11. The average interest as percentage of gross profit stood at 2.12 per cent.

Interest as a percentage of total income fluctuated from 0.19 in 2001-02 per cent to 0.29 percent in 2010-11 except in 2008-09 with 0.89 per cent. The average percentage of interest to total income stood at 0.32 per cent. It can be observed that the percentage of interest to gross profit and total income is increased gradually. The compound growth rate of interest, gross profit and total income stood at 48.42, 26.24, 27.13, 17.57 and 16.74. The gross profit and total income are significant at 5 % level. So the Software Companies are gradually increasing the debt proportion in the capital structure.

### 1.5 CAPITAL STRUCTURE AND ITS IMPACT ON LIQUIDITY

One of the most important methods of financial analysis that is commonly used by both the suppliers of capital and the management of a firm is the ratio analysis. Numbers of ratios are calculated for a period of years and are used to measure the present performance of the firm and also to forecast the likely trend in future. Long-term capital suppliers and owners are primarily interested in profitability of the enterprise. The suppliers of short-term capital are more concerned with the short-term liquid balances. A company may have tremendous potential in terms of profitability in the long run but it may languish due to inadequate liquidity. Company's short-term liquidity position can be measured by using select ratios. The term liquidity refers to the debt paying capacity of the concern. It also means the ability of the firm to provide cash to meet the claims of suppliers of goods, services and capital. Liquidity ratios measure the ability of the firm to meet its current obligations.

Liquidity of a company can be studied in two ways, namely, 1) Technical liquidity and 2) Operational liquidity. Technical liquidity assumes the liquidation concept of business. On the other hand, operational liquidity assumes the going concern concept of business. The presence of liquidity propels a business into success. Both excess and shortage of liquidity have a bearing on the interests of the firm. Excess liquidity reveals that the company is carrying higher current assets than what is required for production. This will lead to blocking-up of funds in current assets without any return. The problems due to shortage of liquidity or inadequate liquidity would be many. Production may have to be curtailed or seized due to lack of necessary funds. The liability of the firm to pay off the debts injures the credit worthiness badly. Due to short liquidity they may be unable to mobilize the required funds from outsiders. Insufficient funds also lead to a slow down in the pace of growth. Liquidity is influenced more by low profitability. In other words, if any firm is earning very low rate of return or is incurring losses, it cannot generate funds needed to repay the debts. In fact, there is a tangle between liquidity and profitability, which determines the optimum level of investment in current assets. Between liquidity and profitability the former assumes a lot of importance since profits could be earned with ease in subsequent periods depending

upon the image, the firm establishes. Once loss is incurred due to inadequate liquidity, it is not easy to regain its lost status. The liquidity position of the Software Industry in India is presented in Table 1.5. The liquidity position is measured by using two selected ratios, namely current ratio and super quick ratio or Absolute liquid ratio.

**TABLE 1.5**  
**LIQUIDITY POSITION OF SOFTWARE COMPANIES IN SOUTH INDIA DURING 2002-2011.** (Rs. in Crores)

Year	CA	CL	ALA	CR	ALR
2001-02	2950.85	1031.96	1862.35	2.86	1.80
2002-03	3323.54	1293.56	1855.09	2.57	1.43
2003-04	3443.7	2316.09	1687.85	1.49	0.73
2004-05	4713.03	2707.35	2298.02	1.74	0.85
2005-06	6554.59	4253.38	3436.76	1.54	0.81
2006-07	10039.47	5822.15	5920.93	1.72	1.02
2007-08	15167.19	6972.37	9756.25	2.18	1.40
2008-09	19730.68	10451.39	13008.22	1.89	1.24
2009-10	22776.07	9941.11	16244.96	2.29	1.63
2010-11	26728.47	11855.33	18512.42	2.25	1.56
Average	11542.76	5664.47	7458.29	2.05	1.25

Source : Annual reports of selected companies.

During the period of study from 2002-11 Current Ratio in select Software Companies in South India varies between 1.49 and 2.86 with an average of 2.05. The average current ratio of select software companies is equal to the standard norm of 2:1 which signifies that the short term debt paying capacity of the select firms is satisfactory.

Liquid ratio measures the relationship between cash and near cash items and immediate debt obligations. The real measure of liquidity will be the ratio between cash and marketable securities to immediate maturing obligations which is termed as Absolute Liquid ratio<sup>4</sup>. The norm of this ratio is 0.5:1, since all the creditors may not expect to demand cash at the same time. The absolute liquidity position was higher than the normal norm for the entire study period. It varies between 1.80 in 2001-02 and 1.56 in 2010-11 with an average of 1.25. This signifies that the absolute liquidity position is highly satisfactory. At any point of time the firm can pay all its creditors in cash.

### 1.6 REASONS FOR LOW PROFITABILITY

It has been observed that the Software Companies in South India during the study period was suffering from the problem of decreasing profitability. The reasons for the same are mentioned below.

The main reason for the decreasing profitability dependence on the internal sources. More than 50 per cent of capital structure was secured from internal sources. The debt as percentage to the capital structure for the entire period of study stood at 11.50 per cent.

### REFERENCE

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