



CAPITAL STRUCTURE IMPACT ON PERFORMANCE OF INDIAN IT FIRMS: A TREND ANALYSIS

Sonika Chaudhary

Research Scholar, Department of Commerce, Maharishi Dayanand University, Rohtak

ABSTRACT

The research objective was to establish effects of capital structure on the performance in financial perspective of IT firms. Theoretically it is assumed that the capital mix a firm uses to finance its operations does not matter and that its future operating income generated by its asset is what determines its value. Trend analysis which included return on equity, ROA, ROCE, PB, TOBIN as dependent variable and leverage measures as the independent variables. These variables were used to establish whether capital structure decisions affect profitability of IT firms in India. The findings of the Trend equations revealed a positive relationship, indicating that a low level of debt is associated with a drop in financial performance and vice versa.

Keywords: *Capital Structure, IT, Performance, Trend*

1. INTRODUCTION

Capital structure plays a critical role which enables an organization address the dilemma of whether or not an optimal capital structure can be achieved. Capital structure decisions are considered to be a vital managerial decision as it influences the shareholder risk and return. Capital structure theories try to explain whether combination of debt and equity matters, and if it does, what might be the optimal capital structure. An optimal capital structure is usually the one that reduces the cost of a company's funds while maximizing the capital gains attributed to the shareholder. Over the years, several theories on this topic have been established by researchers and different academic scholars. These theories include; the theory of Modigliani & Miller (1958), (1963), Trade-off, Pecking order theory. Companies that provide software and information technology services, as well as producers and retailers of technology equipments such as telephones, computers and peripheral devices, digital equipment make up the Information Technology Sector. The technology sector, as per GICS, is divided into three industry groupings, eight industries, and sixteen sub-industries. The technology industries, as well as their sub-industries, are: Systems Software, Computer Hardware, Communications Equipment, Application Software, Internet Software and Services, Software for Home Entertainment, Computer Storage and Peripherals, Other Services & IT Consulting, Technology Distributors, Outsourced Services & Data Processing, etc. Managers have to be very careful when making decisions that relate to the company's capital structure as it has effects on the particular risk and also the returns expected by the shareholders. This study will make contribution to managerial practice on financing of firms, hence aligning firms to these aspects and managerial practices so as to avert risk. This study will be significant and beneficial to current and prospective investors given that they will be able to better understand the impact of capital structure on financial performance of a firm.

2. OBJECTIVE

2.1: The purpose of this research is to look into the performance and capital structure of IT companies throughout time.

2.2: To establish effect of capital structure decision on performance in Information technology (IT) firms in India.

3. RESEARCH METHODOLOGY:

3.1: Sample of the study: The sample includes 19 Information technology firms listed under BSE S&P 500. Furthermore firms with missing data during all ten years are excluded from study and final sample of 19 Information technology (IT) companies were analyzed. The research considered ten-year period from 2010-2020.

3.2: Data Collection and Analysis: The study used secondary data which was collected from PROWESS Database. Analysis on the data collected was done using Statistical packages like STATA.

3.3: Variables understudy: Profitability and Market value metrics were used to assess performance. Profitability was measured by ROA, ROCE, and ROE, while market value was measured by PB and Tobin Q. Five Debt ratios namely Long term debt to total assets (LTDTA), STDTA, DTA, Debt to equity (DE), Total Debt to total Capital (TDTC) were used to evaluate capital structure.

3.4: Empirical model:

The trend analysis of Performance was done using the bivariate regression model indicated in equations (1) to (5), while the trend analysis of Capital Structure was done using equations (6) to (10). Where time was the independent variable and capital structure and performance were the

Dependent variables. The regression coefficients are the intercept α and slope coefficient β , and the year to be examined is denoted by the subscript t.

$$\begin{aligned}
 ROA_t &= \alpha + \beta * Time + \epsilon_t \dots\dots\dots (1) & LTDTA_t &= \alpha + \beta * Time + \epsilon_t \dots\dots\dots (6) \\
 ROCE_t &= \alpha + \beta * Time + \epsilon_t \dots\dots\dots (2) & STDTA_t &= \alpha + \beta * Time + \epsilon_t \dots\dots\dots (7) \\
 ROE_t &= \alpha + \beta * Time + \epsilon_t \dots\dots\dots (3) & DTA_t &= \alpha + \beta * Time + \epsilon_t \dots\dots\dots (8) \\
 PB_t &= \alpha + \beta * Time + \epsilon_t \dots\dots\dots (4) & DE_t &= \alpha + \beta * Time \dots\dots\dots (9) \\
 TOBIN Q_t &= \alpha + \beta * Time + \epsilon_t \dots\dots\dots (5) & TDTC_t &= \alpha + \beta * Time + \epsilon_t \dots\dots\dots (10)
 \end{aligned}$$

4. Result and Discussion: In this section result of trend analysis of capital structure and its impact on performance has been presented.

Trend analysis result of Information technology sector

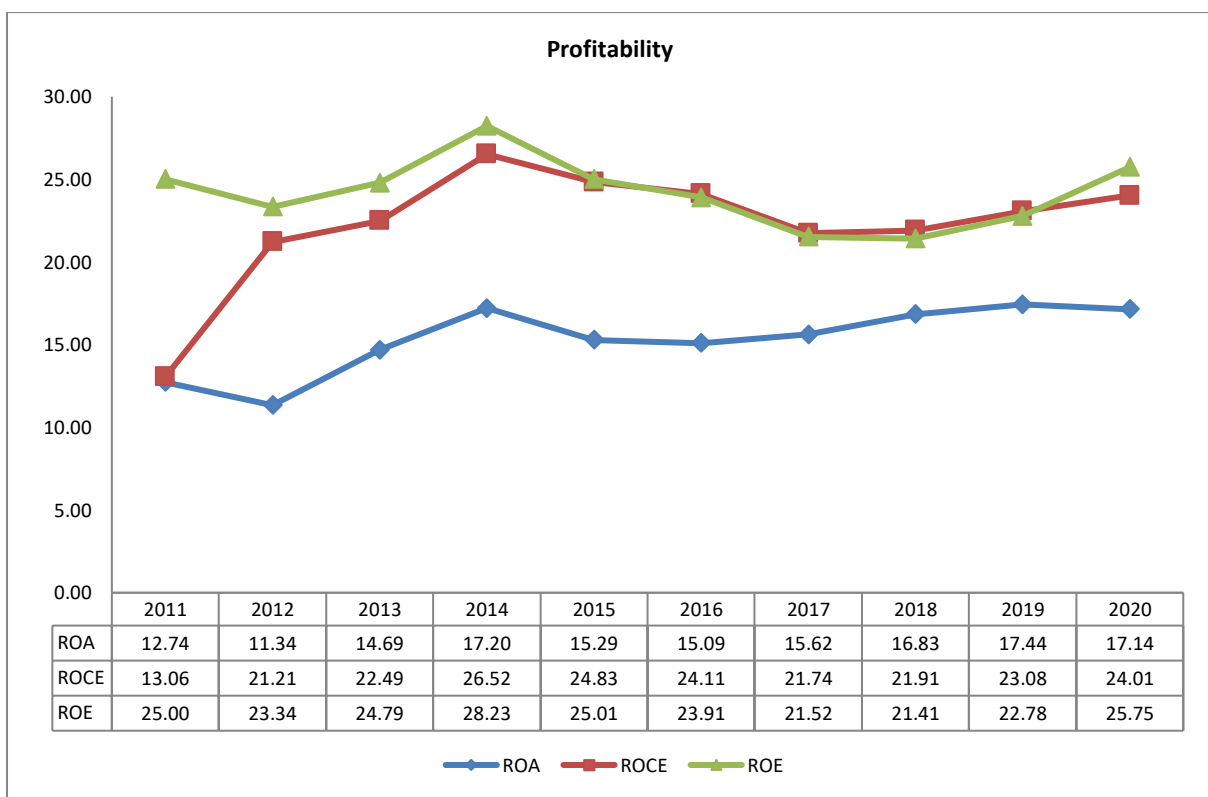


Figure 4.1: Profitability trend of Information technology Sector

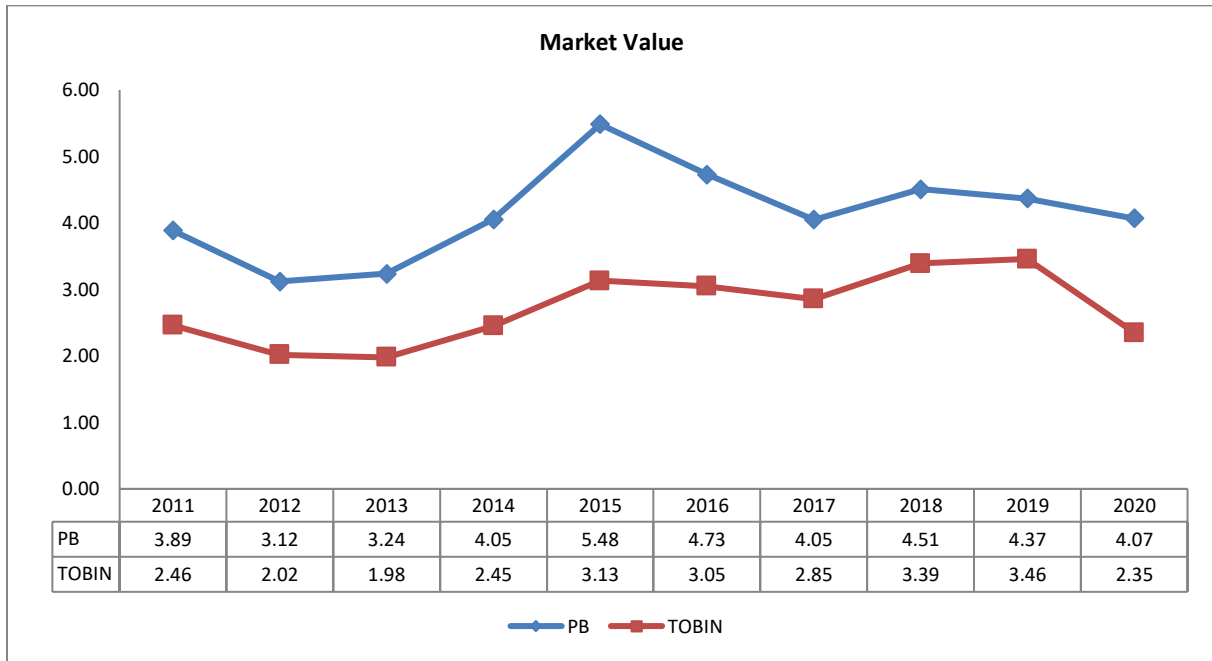


Figure 4.2: Market value trend of Information technology Sector

Table 4A: Bivariate regression result of Performance

DV	ROA	ROCE	ROE	PB	TOBIN
Time	-.534***	-.568	-.214	.097	.105*
Intercept/Constant	12.4***	19.172***	25.352***	3.617***	2.138***
R-squared	.642	.225	.099	.181	.347
F-stat	14.321***	2.328	.882	1.764	4.247*

ROA and ROCE both reached to their maximum point in 2014. PB and Tobin shows increasing trend from 2012 and 2013 onwards respectively. There was evidence for break in 2016 specified by Perron test. PB reached to its maximum in 2015 and thereafter it decreases slightly. For firms in the IT sector, profitability diminishing whereas market value rising.

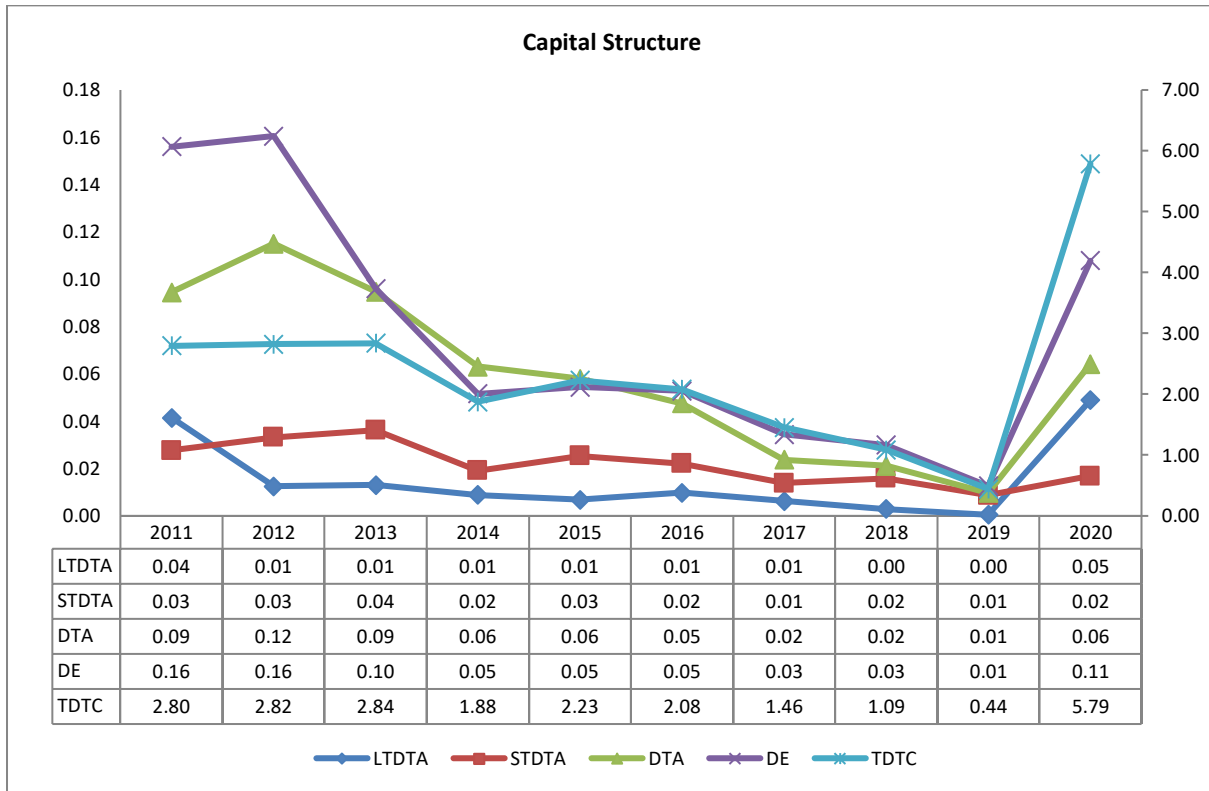


Figure 4.3: Capital structure trend of Information technology Sector

Table 4B: Bivariate regression result of Capital Structure

DV	LTDTA	STDTA	DTA	DE	TDTC
Time	-.0004404	-.002***	-.009***	-.011**	.001
Intercept/Constant	.018	.035***	.109***	.137***	2.339*
R-squared	.007	.672	.627	.426	0
F-stat	.053	16.39***	13.471***	5.933**	0

From 2011 forward, LTDTA and DE have been declining. For STDTA and DTA, Perron test uses the same breakdates as in 2013, 2016, and 2018. DTA peaked in 2012 and began to decline after that. All capital structure measures, according to Perron test, have a breakdate of 2018. All capital structure indicators were at their lowest point in 2019 and subsequently grew in 2020. The slope coefficient in bivariate regression indicates a positive trend in Performance. At a 10% level of significance, Tobin was significant, whereas ROA was significant at a 1% level. Overall, the capital structure shows a downward tendency. At the one percent level, DTA was statistically meaningful, showing a long-term negative trend. Result found negative link of leverage with market value as leverage decreasing, market value increasing, Whereas positive link with Profitability. In general, when it comes to the information technology sector, Performance and financial leverage were found to have a positive link as both are on downtrend.

4. CONCLUSION AND SUGGESTION:

For a ten-year period, the study looked at how capital structure has changed over time and its influence on IT company performance. Because both indicators are on the decline, it was discovered that the capital structure of the selected enterprises is positively associated to their performance. Therefore IT companies were advised to use more debt in their capital structure to improve their performance.

REFERENCES

- [1] Modigliani, F. and Miller, M. H. (1958). The Cost of Capital, Corporate Finance and the Theory of Investment. American Economic Review, 48, 261-97.
- [2] Modigliani, Franco and Merton H. Miller. (1963). Corporate Income Taxes and the Cost of Capital: A Correction. American Economic Review. June, 53(3), 443–53.

-
- [3] DeAngelo, H., & Masulis, R. W. (1980). Optimal capital structure under corporate and personal taxation. *Journal of Financial Economics*, 8(1), 3–29.
- [4] Myers, Stewart C. (1984). The Capital Structure Puzzle. *Journal of Finance*. July, 39(3), 575–92.
- [5] Myers, Stewart C. and Nicholas S. Majluf. (1984). Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have. *Journal of Financial Economics*. 13(2), 187–221.
- [6] Atan, R., Raman, S. A., Sawiran, M. S., Mohamed, N., & Mail, R. (2010). Financial performance of Malaysian local authorities: A trend analysis. In 2010 International Conference on Science and Social Research (CSSR 2010), 271-276.