# Determinants of Capital Structure –Evidence from Listed Information Technology Firms in India

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## Abstract

This paper studies the leverage decisions of Indian information technology (IT) sector firms. It attempts to explain the variation in capital structure of IT firms and determining variables using a regression model. It aims to explore the various factors that determine the choice of long term financing for listed firms. The impact of firms' tangibility, size, profitability, liquidity and earning variability on capital structure of listed Information Technology is investigated. Data of 30 IT firms from 2009-2014 is studied through regression analysis. Multi co-linearity test was performed at first to find out any relation among variables and it was found that none of the variables are strongly correlated, then regression test was run. Profitability is reported to have significantly negative impact while other factors have insignificant positive effect on capital structure. The results are mostly consistent with much of the previous literature. The outcome shows that all these determinants affect the capital structure of a firm in some degree. The study also indicates that firm leverage is positively related to median industry leverage. Additionally, firm size and growth opportunities have positive relationship with firm leverage. On the other hand, profitability and leverage are negatively related. The results support pecking order theory as higher profitability firms tend to have less debt and firms with higher growth opportunities tend to have greater leverage.

**Keywords**: Leverage, liquidity, profitability, regression, tangibility.

## INTRODUCTION

In today's global competitive environment, the success of a firm's financial management is a key indicator of its sustainability. Traditionally corporate finance involved three important decisions. They are capital budgeting, capital structure and working capital management decisions. Among these three capital structure decisions are considered important and fundamentally permanent long term financing of a firm. The assets of a company can be financed either by increasing the owner claims or the creditor claims. The owner claims increase when the firm raises funds by issuing ordinary shares or by retaining the earnings, the creditors' claim increase by borrowings. The various means of financing represent the financial structure of an enterprise. Traditionally, short-term borrowings are excluded from the lists of methods of financing the firm's capital expenditure, and therefore, the long-term claims are said to form the capital structure of an enterprise. The term "Capital Structure" is used to represent the proportionate relationship between debt and equity.  According to pecking order theory the cost of financing increases with asymmetric information. Financing comes from three sources, internal funds, debt and new equity. Firms prioritize their sources of financing, first preferring internal financing, and then debt, lastly raising equity as a "last resort". Hence: internal financing is used first; when that is depleted, then debt is issued; and when it is no longer sensible to issue any more debt, equity is issued. Thus, the form of debt a firm chooses can act as a signal of its need for external finance. The financing or capital structure decision is a significant managerial decision; it influences the shareholder's return and also the risk. Consequently, the market value of the share may be affected by the capital structure decision. The company will have to plan its capital structure initially, at the time of its promotion. Subsequently, whenever funds have to be raised to finance investments, a capital structure is involved. Leverage affects the shareholders' earnings and risk. Under favorable economic conditions, the earnings per share increase with financial leverage. but leverage

also increases the financial risk of shareholders. the objective of a firm should be directed towards the maximization of the firm's value. the capital structure or financial leverage decisions should be examined from the point of its impact on the value of the firm. if capital structure decision can affect a firm's value, then it would like to have a capital structure, which maximizes its market value. What factors affect the firm's financing decisions? Researchers in the corporate finance area have devoted extensive time and effort to ascertain the answer to this important research question through theoretical and empirical means. This question acquired special significance after the publication of seminal papers by Modigliani and Miller (1959, 1963). Several researchers have investigated the determinants of capital structure, often limited to North America from various perspectives. However, there is still no unifying theory of capital structure even after decades of serious research, which leaves the topic open for further research. The choice of capital structure for firms is one of the most fundamental premises of the financial framework of a corporate entity. The method by which public corporations finance their assets sets up their ownership structure and influence whether their corporate governance is of high standard. Quite a large strand of theoretical and empirical research has focused on the area of capital structure since the path-breaking paper on capital structure by Miller and Modigliani published in 1958. However, most of the research work has been carried out in developed economies and very little is known about the capital structure of firms in developing economies. With this very little research, we are not sure whether conclusions from theoretical and empirical research carried out in developed economies are valid for developing countries too; or a different set of factors influence capital structure decisions in developing countries? We are not sure whether conclusions from research on capital structure are portable across countries in general. Rajan and Zingales (1995) studied the G-7 countries while Booth et al (2001) extended this work by including some data from emerging markets. The conclusions from these studies were that there were some common features in the capital structures of firms in different countries but that further research was necessary to identify the determinants of capital structure in particular institutional settings or countries. A firm funds its operation with capital raised from varied sources. A mix of these various sources is generally referred to as capital structure. Capital Structure has been defined as "that combination of debt and equity that attains the stated managerial goals (i.e) the maximization of the firm's market value". The optimal Capital Structure is also defined as that combination of debt and equity that minimizes the firm's overall cost of capital. The firm's balance sheet constitutes different proposition of debt instruments, preferred and common stock, which represents the capital structure of the firm. Capital Structure is an unsolved problem, which has attracted both academics and practitioners as the objective of financial management is to maximize shareholder's wealth. The key issue here is the relationship between capital structure and firm's value. The firm's value is maximized when cost of capital is minimized. Therefore, they are inversely related.

There are different views on how capital structure influences value of the firm. The optimal capital structure is a question which the managers themselves cannot answer. There are varied factors that influence the debt LEVERAGE in a firm. Among the key factors the first is the benefits and cost associated with various financing choices. The trade-off between the benefits and cost leads to well-defined target debt ratio. The second is the existence of shocks that cause firms to deviate, at least temporarily, from their targets. The third is the presence of factors that prevent firms from immediately making capital structure changes that offset the effect of the shocks or financial distress that move them away from their targets. Profit, cash flow, the rate of growth and the leverage of earning's risk are important additional internal factors which influence capital structure.

## LITERATURE REVIEW

As mentioned earlier, there is no specific study which affirms that the capital structure decisions of a service sector firms are influenced with the same factors as that of the manufacturing sector. Predominantly, available literatures on capital structure determinants focus on manufacturing firms. Nevertheless, the existing knowledge of the concept is the key element in framing the further research on the topic. In their revolutionary paper in 1958, Modigliani and Miller (MM) presented that if a company's investment strategy was taken as given, then in a realm of perfect markets- a world without taxes, perfect and reliable disclosure of all data, and no transaction costs related with raising money or going bankrupt, the proportion of debt in a company's capital structure would not affect the firm's worth. The seamless capital markets they presumed have fascinated a wide variety of research of somewhat-less-than-perfect capital markets. The growth of agency theory in the 1980s, along with in depth research into the degree and effects of bankruptcy costs, has led to the current conventional view that corporations act as if there is a sole, optimum capital structure for individual firms that results from a trade-off amid the tax benefits of increasing leverage and snowballing agency and bankruptcy costs that complex debt entails. Because of the idealistic assumptions in MM irrelevance theory, study and investigation on capital structure gave birth to other theories. The trade-off theory explains that a firm's change to an optimum leverage is affected by three factors namely taxes, charges of financial distress and agency costs. Baxter, (1967) argued that the wide spread use of debt surges the chances of bankruptcy because of which creditors demand additional

risk premium and firms should not use debt beyond the point where the cost of debt becomes greater than the tax advantage. Kraus and Litzenberger (1973) argue that if a firm's debt requirements are higher than its earnings then the firm's market value is necessarily a hollow function of its debt obligations. DeAngelo and Masulis (1980) worked further on Miller's differential tax model by considering other non-debt shields such as depreciation charges and investment tax credits. Myers & Majluf, (1984) in their renowned study contended that when managers own larger information and managers decide to finance their investment through issue of stock, the price of company's stock is expected to fall, ceteris paribus i.e. all other things remaining constant. Titman and Wessels, (1988) scrutinized the explaining power of some of the theories of ideal capital structure. They utilized the linear structural modeling in this analysis and observed that firms with exceptional products have comparatively low debt ratios. They also established that smaller firms generally utilize more short-term funds than larger firms. They found no indication that debt ratios are associated with a firm's expected growth, tax shields, or tangibility of assets. Nevertheless, they did find evidence that profitability of the firm was related with debt, as more profitable firms inclined to have less debt relative to market value of equity. Pathak, (1997) inspected the relative significance of six factors in the capital structure decisions of publicly traded Indian firms and found variables such as growth rate, firm size, business risk, liquidity, tangibility of assets and profitability have noteworthy influence on the capital structure chosen by firms in the Indian context. Gosh, A, et.al. (2000) conducted analysis of determinants of capital structure on leverage and found four determinants are statistically influential i.e., fixed asset ratio, R&D expenditure, growth of assets, and advertisement expenditure. Baral, K, (2004) examined the determinants of capital structure and leverage and found that size, growth and earning rate are statically significant with the use of the regression method. Han-Suck Song, (2005) show that most of the determinants of capital structure proposed by capital structure theories appear to be relevant for Swedish firms. De Jong et al., (2008) analyzed the importance of firm specific and country specific factors in the leverage choice of firms across 42 countries. They found that firm specific determinants differ across countries whereas earlier studies suggested that the determinants have an equal impact. Ghani, K &Bhukari, S, (2008), have studied the factors that determine the capital structure of listed energy sector firms in Pakistan. They found that tangibility and size have a positive relation with leverage which supports the forecasts of Static Tradeoff Theory. On the other hand, it is also observed that profitability has a negative relation with a firm's level of debt which is a finding that supports the perspective of Pecking Order Theory. Growth has a positive relation with leverage thus supporting the simple version of Pecking Order Theory. Their results show that the predictive capability of these capital structure theories is mixed as no single theory completely explains the behavior of financial decision makers of these firms. Frank, M & Goyal, V, (2009) has examined the relative significance of many factors in the capital structure decisions of publicly traded American firms. The author has found that the most dependable factors for elucidating market leverage are, median industry leverage, market-book assets ratio, tangibility, profits, log of assets, and anticipated inflation. In addition, they find that dividend-paying firms tend to have lower leverage. Farhat et al, (2009) have examined the trade-off and the pecking order models under a number of institutional environments. They first found that civil law countries follow the pecking order model and depend more on internally generated funds. Qiu and La, (2009) examine the relationship between firm attributes and capital structure in Australian listed firms and found that the relationship between debt to asset ratio and asset tangibility is positive but its relationship with business risk (calculated by unlevered equity beta) and growth prospects is negative. They also find that in spite of the fact that levered firms have more profitability in comparison with unlevered, profitability will reduce levered firms debt ratio. They did not find any effect of firm size on capital structure in Australian listed firms. Their findings are in line with the agency cost and pecking order theories but opposite to the tradeoff theory. Smith, (2009) studies capital structure determinants without tax encouragement. He finds that the relationship between usage of debt and asset tangibility, sales growth, and firm size is positive, and its relationship with firm age, asset liquidity, and profitability is negative. Zaheer, Z, Saeed, A & Mir, A, (2011) have studied the determinants of capital structure in the textile sector of Pakistan and found that size of the firm and the asset structure can have positive bearing on the capital structure of textile sector. The outcome of the study is that large firms depict lower risk and a steady return to the creditors due to which large firms can borrow more. Masnoon, M & Saeed, A, (2014), have found that capital structure has a negative relationship with profitability, liquidity, size and tangibility while has a positive relationship with earning variability. The relationship with profitability and liquidity is observed to be statistically significant while that with size, tangibility and earning variability is stated as statistically not significant.

## RESEARCH METHODOLOGY

Information technology (IT) sector in India has played a vital role in placing India on the global map. IT sector in India has been one of the most significant growth contributors for the Indian economy. The sector has played a significant role in transforming India's image from a slow moving bureaucratic economy to a land of innovative entrepreneurs and a global player in providing world class technology solutions and business services.

The sector has helped India transform from a rural and agriculture - based economy to a knowledge based economy. The Information Technology sector firms in India have not been widely studied in the context of capital structure. The objective of the study is to determine what factors are most influential in determining the capital structure of listed Information Technology sector firms in India. The study intends to find out whether a firm's tangibility of assets, size, liquidity, earning volatility and profitability significantly affect its leverage and what is the direction of this influence (i.e. positive or negative connotation), and to identify which of the capital structure theories better explains the capital structure of these firms. The sector which is selected for the analysis is Information Technology sector because it is one of the fastest growing sectors in India. The sample size for this research comprises of 30 listed IT firms. The data of 30 Information Technology firms has been collected through random sampling technique, which is listed either on BSE or NSE or both. The data of all the thirty Firms has been gathered using financial reports of the respective firms from CMIE Prowess data base. The data of thirty listed companies are selected for the analysis and the time horizon selected is a period of six years from 2009-2014. The methodology adopted for the study is a multivariate regression analysis. The 30 firms are divided into two groups, one where all the firms have been considered and the regression model is run and the other wherein only those firms which have a certain proportion of debt capital in their capital structure has been considered and another regression model is run. This is done to observe why firms prefer having a portion of their capital in the form of debt.

## HYPOTHESIS OF THE STUDY
Hypothesis -1
$H_0$: There is positive relation between profitability and capital structure of firm.
$H_1$: There is negative relation between profitability and capital structure of firm.

Hypothesis -2
$H_0$: There is positive relation between liquidity and capital structure of firm.
$H_1$: There is negative relation between liquidity and capital structure of firm.

Hypothesis - 3
$H_0$: There is negative relation between tangibility and capital structure of firms.
$H_1$: There is positive relation between tangibility and capital structure of firms.

Hypothesis -4
$H_0$: there is positive relation between size of firm and capital structure of firms.
$H_1$: there is negative relation between size of firm and capital structure of firms.

Hypothesis- 5
$H_0$: there is positive relation between earning volatility and capital structure of firms.
$H_1$: there is negative relation between earning volatility and capital structure of firms.

## REGRESSION ANALYSIS:
Objective of the study is to study the influence determining independent variables on the capital structure of firms. For this purpose, regression analysis is performed on sample information technology firms to taking independent variables i.e liquidity, firm size, earning variability, profitability and tangibility, and firm capital structure as a dependent variable. The sample size taken is 30 IT firms and least square method is adopted. Sample firms have been further divided into two categories namely, firms with debt ≤0 and firms with Firms with debt ≥0. Firstly, all the samples with or without debt in capital structure is considered. Later firms with a zero debt have been excluded from the analysis and comparison of both the results of regression has been made to study why some firms maintain a zero level of debt.

The following equation is developed to answer the research question of this study:

$$CS = \alpha + \beta_1(PM) + \beta_2(CR) + \beta_3(TGB) + \beta_4(SZ) + \beta_5(EV) + \varepsilon$$

## RESULTS & DISCUSSION

Table 1 Descriptive statistics

|  | Firms with debt ≤0 | | | Firms with debt ≥0 | | |
|---|---|---|---|---|---|---|
| Variables | Mean | Std. Deviation | N | Mean | Std. Deviation | N |
| Capital structure | 0.31 | 0.586 | 26 | 0.28 | 0.562 | 26 |
| Liquidity | 2.09 | 1.098 | 26 | 2.27 | 1.344 | 26 |
| Size | 2.61 | 0.894 | 26 | 2.69 | 0.921 | 26 |
| Earning Variability | 158.58 | 568.135 | 26 | 144.11 | 538.592 | 26 |
| Profitability | 0.13 | 0.162 | 26 | 0.15 | 0.165 | 26 |
| Tangibility | 0.25 | 0.135 | 26 | 0.23 | 0.138 | 26 |

Table 2 Correlation Matrix of Firms with debt ≤0

| Variables | CS | LQ | SZ | EV | PM | TGB |
|---|---|---|---|---|---|---|
| Capital structure | 1.00 | -0.329 | -0.111 | -0.107 | -0.702 | 0.267 |
| Liquidity | -0.329 | 1.000 | 0.056 | 0.396 | 0.543 | -0.423 |
| Size | -0.111 | 0.056 | 1.000 | -0.443 | 0.184 | -0.076 |
| Earning Variability | -0.107 | 0.396 | -0.443 | 1.000 | 0.202 | -0.105 |
| Profitability | -0.702 | 0.543 | 0.184 | 0.202 | 1.000 | -0.385 |
| Tangibility | 0.267 | -0.423 | -0.076 | -0.105 | -0.385 | 1.000 |
| Sig. (1-tailed) |  |  |  |  |  |  |
| Capital structure | . | 0.041 | 0.283 | 0.290 | 0.000 | 0.081 |
| Liquidity | 0.041 | . | 0.386 | 0.017 | 0.001 | 0.011 |
| Size | 0.283 | 0.386 | . | 0.008 | 0.170 | 0.347 |
| Earning Variability | 0.290 | 0.017 | 0.008 | . | 0.147 | 0.293 |
| Profitability | 0.000 | 0.001 | 0.170 | 0.147 | . | 0.020 |
| Tangibility | 0.081 | 0.011 | 0.347 | 0.293 | 0.020 | . |

The above table indicates that Liquidity shows a negative relation with capital structure and tangibility, while it has a positive relation with size, earning volatility and profitability. The table shows that the correlation coefficient of liquidity with capital structure and tangibility is -0.329 and -0.423 respectively. The correlation coefficient with size, earning volatility and profitability is 0.056, 0.396 and 0.543 respectively. Similarly, size has negative relation with capital structure, earning volatility and tangibility while, it shows no relation with liquidity. Earning Volatility shows a positive relation with liquidity and profitability with a correlation coefficient of 0.396 and 0.202 respectively and its relation with capital structure, tangibility and size is negative with correlation coefficient of -0.107, -0.105 and -0.443 respectively. Profitability indicates a positive relation with liquidity, size and earning volatility with a correlation coefficient of 0.543, 0.184 and 0.202 respectively while with tangibility and capital structure it has a negative relationship with correlation coefficient of -0.385 and -0.702 respectively. Tangibility has a positive relation with capital structure with a correlation coefficient of 0.267 and it shows a negative correlation with all other variables.

Table 3 Correlation Matrix of Firms with debt ≥0

| Variables | CS | LQ | SZ | EV | PM | TGB |
|---|---|---|---|---|---|---|
| Capital structure | 1.00 | -0.339 | -0.076 | 0.123 | -0.696 | 0.211 |
| Liquidity | -0.339 | 1.000 | -0.211 | 0.561 | 0.494 | -0.312 |
| Size | -0.076 | -0.211 | 1.000 | -0.461 | 0.120 | 0.000 |
| Earning Variability | -0.123 | 0.561 | -0.461 | 1.000 | 0.252 | -0.153 |
| Profitability | -0.696 | 0.494 | 0.120 | 0.252 | 1.000 | -0.280 |
| Tangibility | 0.211 | -0.312 | 0.000 | -0.153 | -0.280 | 1.000 |
| Sig. (1-tailed) | | | | | | |
| CS | . | 0.045 | 0.356 | 0.275 | 0.000 | 0.150 |
| Liquidity | 0.045 | . | 0.151 | 0.001 | 0.005 | 0.060 |
| Size | 0.356 | 0.151 | . | 0.009 | 0.279 | 0.500 |
| Earning Variability | 0.275 | 0.001 | 0.009 | . | 0.107 | 0.228 |
| Profitability | 0.000 | 0.005 | 0.279 | 0.107 | . | 0.083 |
| Tangibility | 0.150 | 0.060 | 0.500 | 0.228 | 0.083 | . |

The above table indicates that liquidity has a negative relation with capital structure, size and tangibility, while it has a positive relation with earning volatility and profitability. The table shows that the correlation coefficient of liquidity with capital structure, size and tangibility is -0.339, -0.211 and -0.312 respectively. The correlation coefficient with, earning volatility and profitability is 0.561, and 0.494 respectively. Similarly Size has negative relation with capital structure, liquidity and earning volatility and while it shows no relation with tangibility. Earning Volatility shows a positive relation with liquidity and profitability with a correlation coefficient of 0.561 and 0.252 respectively and its relation with capital structure, tangibility and size is negative with correlation coefficient of -0.123, -0.153 and -0.461 respectively. Profitability indicates a slightly positive relation with liquidity, size and earning volatility with a correlation coefficient of 0.494, 0.120 and 0.252 respectively while with tangibility and capital structure it has a negative relationship with correlation coefficient of -0.280 and -0.696 respectively. Tangibility has a positive relation with capital structure with a correlation coefficient of 0.211 and it shows a negative correlation with all other variables.

Table 4 Regression Results

| Model | R | $R^2$ | Adj. $R^2$ | F | Sig. |
|---|---|---|---|---|---|
| Firms with debt ≤0 | 0.706 | 0.499 | 0.390 | 4.577 | 0.005 |
| Firms with debt ≥0 | 0.700 | 0.489 | 0.362 | 3.835 | 0.013 |

R-square measures the proportion of the variation in the dependent variable (Capital Structure) that was explained by variations in the independent variables. In this study, the "R-Square"' indicates that 49.9% of the variation for firms with debt ≤0 and 48.9% for firms with debt ≥0 are explained. The above table highlights the soundness of research model used in this study. The ANOVAs F statistic is 4.577 and 3.835 respectively and it is significant at 5% level, which means that the model has a good fit and there is 95% chance that the variables are have statistically significant.

Table 5 Beta, Standard Error, T-statistics and level of significance of Firms with debt ≤0

| Model | Coefficients β | Std.Error | Standardised Coefficients β | t | Sig. | 95.0% Confidence Interval for B | |
|---|---|---|---|---|---|---|---|
| | | | | | | Lower | Upper |
| (Constant) | 0.511 | 0.378 | | 1.352 | 0.190 | -0.271 | 1.294 |
| Liquidity | 0.028 | 0.083 | 0.066 | 0.334 | 0.741 | -0.144 | 0.199 |
| Size | 0.024 | 0.107 | 0.040 | 0.226 | 0.823 | 0.1970 | .245 |
| Earning Variability | 3.786 | 0.000 | 0.036 | 0.193 | 0.849 | 0.000 | 0.000 |
| Profitability | -2.548 | 0.625 | -0.748 | -4.0789 | 0.000 | -3.840 | - |
| Tangibility | 0.057 | 0.681 | 0.014 | 0.083 | 0.934 | 1.255 | 1.465 |

Dependent Variable: CS

The table "Coefficients" provides information on the confidence with which we can support the estimate for each such estimate. The above table shows that for firms with debt ≤0, liquidity is positively related to capital structure. The coefficient is 0.028 whereas the t-statistics is 0.334 and p value is 0.741 which proves that the result is not statistically significant. It accepts the null hypotesis. This relation is inconsistent with expectations as well as the studies conducted by Masnoon& Anwar (2012), Gaud, et al. Size is found to be positively related to the capital structure having a coefficient of 0.024. The t-statistics is 0.226 and p value is 0.823 which proves that the result is statistically insignificant. It accepts the null hypothesis. Earning Volatility has a negligible positive relation with capital structure. It has a coefficie[1]nt of 0.00003786 whereas the t-statistics is 0.193 and p value is 0.849 thus proving that the result is insignificant. It accepts the null hypothesis. Profitability is negatively related to the capital structure. The coefficient is -2.548 whereas the t-statistics is -4.078 and p value is 0.000 which proves that the result is statistically signiificant. It accepts the alternate hypothesis and is consistent with the results of study conducted by Masnoon& Anwar (2012), Shah& Khan. This result supports the pecking order theory which says that firms finance first from internal equity and then they go for debt. In the event higher profits , firms fulfill their funding requirements by retaining earning which reduces their debt level so there is an inverse relation between between profitability and debt level. Tangibility is found to be positively related to the capital structure having a coefficient of 0.057. The t-statistics is 0.083 and p value is 0.934 which proves that the result is statistically insignificant. It accepts the null hypothesis.

Table 6 Beta, Standard Error, T-statistics and level of significance of Firms with debt ≥0

| Model | Coefficients β | Std.Error | Standardised Coefficients β | t | Sig. | 95.0%Confidence Interval for B | |
|---|---|---|---|---|---|---|---|
| | | | | | | Lower | Upper |
| (Constant) | .549 | 0.469 | | 1.170 | 0.256 | -0.429 | 1.528 |
| Liquidity | -0.015 | 0.117 | -0.028 | -0.127 | 0.900 | -0.259 | 0.230 |
| Size | 0.031 | 0.123 | 0.047 | 0.252 | 0.803 | -0.226 | 0.288 |
| Earning Variability | 9.854E-005 | 0.000 | 0.095 | 0.446 | 0.660 | 0.000 | 0.001 |
| Profitability | -2.558 | 0.700 | 0.706 | -3.656 | 0.002 | -4.018 | -1.098 |
| Tangibility | 0.083 | 0.741 | 0.019 | 0.112 | 0.912 | -1.463 | 1.629 |

The above table shows that for Firms with debt ≥0 liquidity is negatively related to capital structure. The coefficient is -0.015 whereas the t-statistics is -0.127 and p value is 0.900 which proves that the result is not statistically significant. It accepts the null hypotesis. This relation is inconsistent with expectations as well as the studies done by Masnoon& Anwar(2012), Gaud, et al.(2003). Size is found to be positively related to the capital structure having a coefficient of 0.031. The t-statistics is 0.252 and p value is 0.803 which proves that the result is statistically insignificant. It accepts the null hypothesis. Earning Volatility has a negligible positive relation with capital structure. It has a coefficient of 0.00003786 whereas the t-statistics is 0.193 and p value is 0.849 thus proving that the result is insignificant. It accepts the null hypothesis.Profitability is negatively related to the capital structure. The coefficient is -2.558 whereas the t-statistics is -3.656 and p value is 0.002 which proves that the result is statistically signiificant. It accepts the alternate hypothesis and is consistent with the results of study conducted by Masnoon& Anwar(2012), Shah& Khan(2007). This result supports the pecking order theory which says that firms finance first from internal equity and then they go for debt. In the event higher profits , firms fulfill their funding requirements by retaining earning which reduces their debt level so there is an inverse relation between between profitability and debt level. Tangibility is found to be positively related to the capital structure having a coefficient of 0.083. The t-statistics is 0.112 and p value is 0.912 which proves that the result is statistically insignificant. It accepts the null hypothesis.

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Table: 7 determining variable and their relationship with static trade off and pecking order theory

| Variable | Measured by | Expected relation with static trade off theory | Expected relation with pecking order theory | Observed relationship in this study |
|---|---|---|---|---|
| Tangibility | Fixed assests (Net)/Total Assets | Positive | Negative | Positive |
| Size | Log of sales | Positive | Negative | Positive |
| Growth | EBT/Total Assets | Negative | Negative/ Positive* | Positive |
| Profitability | % change in Total Assets over the previous years | Positive | Negative | Negative |

*simple and complex version of pecking order theory

## CONCLUSIONS

In this study, it can concluded that profitability is has significantly negative impact, while all the other variables have insignificant positive impact on capital structure. The regression result shows that larger the firm, higher the long-term debt and vice versa. Large firms indicate low level of risk and a steady return to the creditors, due to which large firms can borrow more. The credibility of the firm is higher due to its low chances of default. The reason for this is that as the firm's resources increase, it can cover its losses to a greater extent, thus enabling itself to borrow more. Borrowing would also significantly reduce the taxes but a certain feasible region is necessary to extract maximum performance from the firm's business. Even if sufficient resources back up a firm, an increase in the long-term debt beyond the capabilities of the firm can lead to severe consequences.

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