

# Determinants of Capital Structure: Experience of Indian Cotton Textile Industry\*

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## Abstract

*The present study has two objectives: Firstly, to identify important determinants of capital structure and secondly to test for the applicability of trade-off and pecking order theories based on sample data drawn from the Indian Cotton Textile Industry for the five year period 2003-04 to 2007-08. Multiple Regression Analysis and Step-wise regression analysis have been carried out taking total debt to equity ratio as the dependent variable. Profitability, growth opportunities, liquidity and business risk turned out to be the most important determinants, followed by non-debt tax shield and uniqueness. Only firm size and asset structure, two of the eight explanatory variables of the study, were not found to be significant even at ten percent level. On the basis of the signs of the regression coefficients trade-off theory has been found to be applicable, rather than pecking order theory, a position upheld by other empirical research works in the area.*

**Keywords:** *Capital Structure, Trade-off theory, Pecking order theory, Business Risk, Uniqueness and Non-debt tax shields.*

## 1.0 INTRODUCTION

Modigliani-Miller Theory (1958, 1963) on corporate capital structure has evoked enormous amount of interest in researchers over the years that led to the emergence of two broad theories. These are the trade-off theory along with its variants (Ogden et al 2003, Berk and De Marzo 2007) and

the Pecking order theory (Myers 2003, Myers and Majluf 1984).

Trade-off theory supports the existence of an optimal capital structure that maximizes the value of a firm. The value of a levered firm will be more than the value of an unlevered or all equity financed firm belonging to the same business risk class. The interest

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tax shield of debt capital increases the value while cost of financial distress, likely to be caused by debt, decreases it. This is summarized by the familiar equation:

*Value of a levered firm ( $V_L$ ) = Value of an unlevered firm ( $V_U$ ) + P. V. (Interest tax shield) - P. V. (Cost of Financial Distress)*

An extension of the trade-off theory even reckons with the present values of the agency costs and benefits of a levered firm (Meckling and Jensen 1976, Jensen 1986). Although trade-off theory is more realistic in the sense that it avoids the extreme position of Modigliani-Miller that firms should take on as much debt as possible, it fails to explain the case of profitable companies' unwillingness to avail interest tax shields and deliberately going in for low debt ratios. The case of Asian Paints for the year 2005 was cited (Brealey et al 2007) to highlight this.

The pecking order theory is based on informational asymmetry between inside managers and outside investors which induces managers to follow a pecking order while financing investment projects. According to this theory, internal equity is accorded the highest priority followed by debt, hybrid securities like convertibles and external equity in the form of new share issues, getting the lowest priority. There is thus no optimal debt equity ratio in the conventional sense of the

term as equity of the internal variety in the form of reserves and surplus is at the top of financing hierarchy while external equity is at its bottom. Pecking order theory can explain the case of large mature companies having ready access to debt markets (L. Shyam Sunder and Myers 1999) but not the case of small and relatively young firms that prefer external equity to debt ( Frank and Goyal, 2003).

The caveats of both trade-off and pecking order theories must have led Myers (2003), to "think critically about the factors which may govern actual (financial) decisions".

## 2.0 OBJECTIVES OF THE STUDY

In view of the foregoing discussion we have set forth the following twin objectives for the present study.

- To consider important variables that impact debt-equity choice of a company and test for their applicability by means of multiple regression analysis in the context of Indian cotton textile industry.
- On the basis of signs of the coefficients in the above multiple regression analysis results, examining the applicability of trade-off or pecking order theories for the Indian cotton textile industry.

## 3.0 LITERATURE SURVEY

Although studies on capital structure were mostly confined to developed

countries like USA and UK such as by Rajan and Zingales (1995) and Myers (1977), considerable progress is made even in the Indian context. Perhaps the first comprehensive study on the capital structure of Indian corporate sector is made by Chakraborty (1977) wherein total debt to equity was considered as the dependent variable. Age, retained earnings, profitability and capital intensity have shown negative impact while total assets and capital intensity have shown positive influence. More recent studies based on more sophisticated econometric methods (Kakani and Reddy, 1996 and Kakani 1999) revealed profitability<sup>3</sup>, capital intensity<sup>4</sup> and non-debt tax shields<sup>5</sup> as important determinants of capital structure. In their study it is observed that debt equity ratios are on the high side.

Singh and Hamid (1992), come out with the findings, which say that Indian firms depend more heavily on the external sources than on the internal resources. They are highly indebted because the capital market in India is not mature. So they are not able to raise funds from the capital

market by issuing equities. Therefore, the debt-equity ratio is on the high side. Singh (1995) compares more systematically the pattern and structure of corporate finance in developing countries with that of the advanced economies. He has found that the degree of external financing in terms of new equity issues and borrowing for the top developing countries' corporations are very high.

Study by Bhaduri (2002), shows that the optimal capital structure choice in developing countries is strongly influenced by factors such as size, asset structure, profitability and financial distress cost. Similar study is also done by Sahoo and Omkarnath (2005) in Indian Private Corporate Sector which shows firm size as the least significant factor to affect long term debt ratio.

Mazur (2007) examines the theory of capital structure for corporations in Poland. The author's findings state that profitability with negative sign is the most important variable influencing capital structure of the Polish companies, which means because of lack of internal funds, firms are using more debt financing. It seems that pecking order theory is applicable there.

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3. Profitability: a) Average return on assets, b) Average return on capital employed.
  4. Capital intensity: a) Gross fixed assets to total assets, b) Gross fixed assets to total sales
  5. Non-debt tax shields :  $(\text{PBDIT}-\text{I}-\text{T}/0.5) / \text{Total Assets}$ ; Where, PBDIT : Operating Income, I : Interest Payments, T: Tax Payments and 0.5: Average Corporate Tax Rate during study period

#### 4.0 CHOICE OF VARIABLES AND FORMULATION OF HYPOTHESES

In this section a brief discussion of the variables, drawn from the two theories and earlier empirical research, is provided.

##### 4.1 Asset Structure

Companies having a large portion of tangible assets that provide good collateral value to lenders experience less financial distress costs. They can afford to have high debt equity ratios in their capital structure. Thus a positive relation can be expected between debt ratio and asset structure having a large portion of fixed assets according to trade-off theory. The ratio of net fixed assets to total asset is taken to be the measure of asset structure. (Asset Structure = Net fixed Assets / Total Assets)

##### 4.2 Profitability

A profitable firm has the potential to absorb a large amount of interest payments and thus derive tax shield arising out of a high debt ratio which is not the case with a less profitable firm. Thus a positive relation can be expected between profitability and debt ratio according to trade-off theory. On the other hand, pecking order theory suggests a negative relation as high profits mean a larger amount of retained earnings, given the dividend policy which is usually sticky and lesser reliance on external finance. Thus

profitability is an important variable under both the theories. Profitability is taken to be the percentage of operating profit before interest and tax to capital employed in the present study. (Profitability = PBIT / Capital Employed)

##### 4.3 Growth Opportunities

Myers (1977) argued that firms with growth opportunities may find it difficult and costly to rely on debt for financing, as the degree of risk may be high for growth oriented investments. Therefore, a negative relation is expected between growth and debt as per trade off theory. Alternatively as per pecking order theory high growth firms have greater need for funds and are, therefore, expected to borrow more. In this regard a positive relation is expected between debt and growth opportunities at least for large mature firms. Compound average growth rate of annual sales has been taken as a measure of growth opportunities. (Growth Opportunities = compound average growth of annual sales)

##### 4.4 Size of the firm

As per trade-off theory as the proportion of debt increases in the capital structure, bankruptcy cost appears to be a constituent in the total value of the firm. Firm's debt taking capacity is also influenced by its size. Titman and Wessels (1988) suggested that mostly larger firms are more

diversified and therefore there are less chances of their turning bankrupt. In this respect trade-off theory may suggest a positive relation between debt and firm size. Alternatively Kakani (1999), following Weston and Brigham (1981) argued that larger firms, in case of financial requirements, may go for additional issue of external equity, which will have very little impact on its control. Myers and Majluf (1984) suggest that information asymmetries are less in case of larger firms and therefore they have the advantage to issue equity instead of debt. Thus negative relation is expected under pecking order theory between debt and firm size. Size is taken to be the natural logarithm of total assets. (Size= Natural Logarithm of Total Assets)

#### 4.5 Uniqueness

Titman (1984) has suggested that firms manufacturing unique products tend to have high liquidation costs and therefore go in for low debt ratios. Therefore, uniqueness is expected to show a negative relation with debt under trade-off theory. He has mentioned, "indicators of uniqueness include expenditure on research and development over sales (RD/S), selling expenses over sales (SE/S) and quit rates (QR), the percentage of the industry's total work force that voluntarily left their jobs in the sample year". The most appropriate proxy for studying uniqueness may be research

and development expenditure of the companies and selling and distribution costs incurred by them. But due to unavailability of data on research and development of cotton textile companies, selling and distribution cost over total sales has been used. (Uniqueness= Selling and distribution cost / Total Sales)

#### 4.6 Business Risk

Financial prudence suggests that firms having high business risk in the form of variability in the operating profit should not go for high financial risk in the form of high debt equity ratio. Both trade-off and pecking order theories suggest a negative relation between business risk and debt equity ratio. For the present study business risk is measured as the coefficient of variation in operating profits. (Business Risk = coefficient of variation in operating profits)

#### 4.7 Non-debt Tax Shields (NDTS)

De Angelo and Masulis (1980), considered items like depreciation, research and development expenditure that also provide tax shield but are not related to debt. The larger the quantum of non-debt tax shield the lesser will be the motivation of managers to go in for debt in their capital structure. A negative relationship is expected under the trade-off theory between NDTS and debt ratios. Pecking order theory considers tax benefits whether arising

out of debt or non-debt sources as of secondary importance and hence no relation is expected. In Indian context also items like depreciation, development rebate (since abolished), and research and development expenditure, preliminary and pre-operative expenditure etc. constitute NDTs. It is measured as:

$$NDTS = PBDIT - I - T / .34$$

where,

*PBDIT = Operating Profit; I = Interest payments, T = Amount of Tax*

*Average tax rate during the study = 34%*

The indicator, non-debt tax shield over total assets is used in this paper. (Non-debt tax shield =  $NDTS / \text{Total Assets}$ )

#### 4.8 Liquidity

As per pecking order theory firms have a preference for internal funds over external. This is captured by maintaining liquidity. Firms that are maintaining their liquid resources are not essentially in the need of debt or borrowings from outside. Therefore, a negative relation is expected between liquidity and debt. Alternatively, trade off theory suggests that a firm should have high liquidity in order to servicing high debt. Even Jensen's (1986) free cash flow theory suggests a positive relation between liquidity and debt ratio as cash rich firms should have a tendency to acquire additional debt so that very little extra cash is

available for managers to squander, after meeting the debt servicing obligation. (Liquidity =  $\text{Current Assets} / \text{Current Liabilities and provisions}$ )

#### 4.9 Capital structure definition

In the literature alternative measures are used for the leverage or debt equity ratio. Titman and Wessels (1988) have used six measures of capital structure ratios, namely long term debt to book value of equity, short term debt to book value of equity, convertible debt to book value of equity, long term debt to market value of equity, short term debt to market value of equity and convertible debt to market book value of equity. Kakani (1999) has considered three measures of debt viz long term, short term and total debt. Mazur (2007) has considered total debt to total assets for a sample of Polish companies.

In the present study no distinction is made between short term and long term debt. Only total debt is considered for two reasons. According to Indian Companies Act, debt is shown on the long term liabilities side of the balance sheet under the heads of secured and unsecured debt. Secondly, the so called short term debt usually taken for financing current assets, gets renewed or renegotiated every year. Consequently, the short term debt becomes more permanent

than long term debt which may have to be repaid in installments. Debt ratio is considered in the form of total debt to total equity.

## 5.0 SAMPLE AND METHODOLOGY

### 5.1 Study Period

The period of study is from 2003-04 to 2007-08. Time-wise averages of study variables are taken to smooth year to year fluctuations except in the case of compound average annual growth rate of sales. Cotton textile industry, one of the oldest industries, is taken up for the present study.

### 5.2 Sources of Data

The data for analysis are drawn from CMIE (Centre for Monitoring Indian Economy). Data on company balance sheets and profit and loss accounts are obtained from the website [www.money.pore.com](http://www.money.pore.com) and [www.money.rediff.com](http://www.money.rediff.com). Further, the respective websites of the sample companies have also been looked into as and when required.

### 5.3 Sample selection is based on the basis of the following criteria:

- A company should have maintained its identity and reported annual account during the study period without any gap.
- The company should not have incurred loss during any one of the five year period chosen. This

criterion is imposed to ensuring less distortion in the data. The loss in any year may considerably alter the company's average figures. The bias factor is not likely to distort the results as heterogeneity in the data is not lost which can be gauged from the profitability ratios which range from 2.23% to 51.02% during the study period.

- No negative net worth should have arisen during the study period on account of accumulated past losses

Application of the above three criteria has led to the selection of a sample of 78 profit making companies.

## 6.0 ANALYSIS OF DATA

### 6.1 Pair-wise Correlation

Pair-wise correlations are calculated for all the study variables, both dependent and independent, with a view to find their degree of linear relationships. These are presented in Table 1, captioned correlation Matrix. This is followed by multiple regression analysis carried out with the help of SPSS package, 17.0 version. Regression results are presented in Table 2.

From table 1 it is clear that debt equity ratio is highly correlated with growth opportunities and liquidity, both of which are significant at 1% level, and

**Table 1: Correlation Matrix**

	Debt/ Equity	Asset Struc- ture	Profita- bility	Growth Oppor- tunities	Size	Business Risk	Liquidity	Uniqu- eness	NDTS _TA
Debt/Equity	1	-.176	-.155	-.415***	-.230**	.044	.993***	-.120	-.104
		(.124)	(.176)	(.000)	(.043)	(.699)	(.000)	(.294)	(.367)
Asset Structure	-.176	1	.241**	.003	.217*	-.193*	-.187*	-.083	.043
	(.124)		(.034)	(.978)	(.056)	(.091)	(.100)	(.468)	(.710)
Profitability	-.155	.241**	1	.431***	-.179	-.089	-.187	-.139	.311***
	(.176)	(.034)		(.000)	(.117)	(.441)	(.102)	(.225)	(.006)
Growth Opportunities	-.415***	.003	.431***	1	.155	.059	-.390***	.008	.139
	(.000)	(.978)	(.000)		(.176)	(.609)	(.000)	(.946)	(.2250)
Size	-.230**	.217*	-.179	.155	1	-.041	-.216*	.296***	-.229**
	(.043)	(.056)	(.117)	(.176)		(.720)	(.058)	(.008)	(.044)
Business Risk	.044	-.193*	-.089	.059	-.041	1	.027	-.151	-.063
	(.699)	(.091)	(.441)	(.609)	(.720)		(.812)	(.187)	(.583)
Liquidity	.993***	-.187*	-.187	-.390***	-.216*	.027	1	-.129	-.135
	(.000)	(.100)	(.102)	(.000)	(.058)	(.812)		(.261)	(.238)
Uniqueness	-.120	-.083	-.139	.008	.296***	-.151	-.129	1	-.171
	(.294)	(.468)	(.225)	(.946)	(.008)	(.187)	(.261)		(.135)
NDTS_TA	-.104	.043	.311***	.139	-.229**	-.063	-.135	-.171	1
	(.367)	(.710)	(.006)	(.225)	(.044)	(.583)	(.238)	(.135)	

\*\*\* Significant at the 0.01 level (2-tailed)

\*\*Significant at the 0.05 level (2-tailed).

\*Significant at the 0.10 level (2-tailed).

p values are indicated within brackets.



size, significant at 5% level, respectively. Among independent variables the correlations between profitability and growth opportunities as also non-debt tax shield are significant at 1% level while it is significant at 5% with asset structure. Correlation between size and uniqueness is significant at 1% level, non-debt tax shield at 5% level and asset structure at 10% level.

## 6.2 Regression results for the study period

All the eight explanatory variables are included in regression study. The model is represented as follows:

$$TD/TE = \beta_0 + \beta_1 AS + \beta_2 P + \beta_3 U + \beta_4 BR + \beta_5 GO + \beta_6 L + \beta_7 S + \beta_8 NDTS + \epsilon$$

Where

TD/TE = Total Debt / Total Equity

U = Uniqueness

P = Profitability

AS = Assets Structure

BR = Business Risk

GO = Growth Opportunities

NDTS = Non debt tax shield

L = Liquidity

S = Size

The study is essentially a cross sectional regression analysis using time averages over the five year period. This approach is preferred over panel regression. Panel data regression is usually chosen, *inter alia*, to get over problems of multicollinearity and inadequacy of degrees of freedom which are not expected to be present

in the study. Time series regression analysis is about trends over a long period of time which becomes a separate study by itself.

From table 2 it can be seen that regression coefficients of explanatory variables 'profitability', 'growth opportunities', 'liquidity' and 'business risk' are significant at 1% level while non-debt tax shield and uniqueness are significant at 3.5% and 7.2% respectively. To check whether multicollinearity problem exists in the present study variance inflating factor (VIF) is calculated for each of the eight explanatory variables and presented in the last column of table II. These values range from 1.092 to 1.586 and are much less than the rule of thumb range of 5-10, the maximum value of VIF that suggest the existence of multicollinearity problem as indicated in Gujarati and Sangeetha (2007). The study is, therefore, not affected by the problem of multicollinearity.

The analysis of variance is presented in table 3 below:

Table 4 presents value of R square which is equal to .990 which suggests that 99% of variation in capital structure has been explained by the explanatory variables such as profitability, growth opportunities, liquidity, business risk, and non-debt tax shield.

**Table 2 : Regression results**

Variables	$\beta$	Std. Error	t	p values	VIF
(Constant)	-.386	.126	-3.057	.003	
Assets Structure	.052	.173	.299	.766	1.295
Profitability	1.358	.402	3.376	.001	1.586
Growth Opportunities	-.344	.088	-3.907	.000	1.556
Size	.001	.019	.037	.971	1.404
Liquidity	.123	.002	72.303	.000	1.295
Business Risk	.051	.020	2.522	.014	1.092
Uniqueness	1.589	.868	1.829	.072	1.199
NDS_TA	.884	.412	2.146	.035	1.188

**Table 3: ANOVA**

Model	Sum of Squares	d.f	Mean Square	F	p
values					
Regression	302.553	8	37.819	861.424	.000
Residual	3.029	69	.044		
Total	305.583	77			

*F-Statistic giving p value .000 depicts that regression model is highly significant in this study.*

**Table 4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.995	.990	.989	.2114315

#### 6.4 Interpretation of Results

The textile sector has been suffering for a long time and the government of India has to take the initiative in phasing out the Multi Fibre Agreement (MFA) since 1991 and

subsequently setting up a Technology Upgradation Fund Scheme (TUFS), Narayanan (2008). This can be noticed from the fact that only about 12% of the companies belonging to the cotton textile industry could satisfy the

profitability and data continuity criteria for inclusion into the sample. Even for the sample companies the average operating profit margin (operating profit before interest and tax to sales) is only 1.38% and average profitability percentage in terms of PBIT to capital employed is 13.85%. Even average debt equity ratio for the study period is only about 38.44% which is much less than the average debt ratio of 60% in India for nearly "16 years (1990-2005)" as stated by Brealey et al (2007).

Though profitability, growth opportunities are low they are highly significantly related to debt to equity ratio in a manner that tends to support the trade-off theory. Liquidity which is on the high side with an average current ratio of 2.05 is significant and is having the positive sign expected by the trade-off theory. Non-debt tax shield though significant at 3.5% is not having the negative sign expected in the trade-off theory. Business risk and uniqueness, though significant at 5% and 10% level respectively, do not exhibit the signs expected under trade-off theory.

The actual results of the present study along with the expected ones under trade-off and pecking order theories are summarized in Table 5. Asset structure, profitability, growth opportunities and liquidity variables

exhibit the same signs expected under trade-off theory. Uniqueness and non-debt tax shield variables are not expected to have any specific relation under pecking order theory but their existing signs are not in accordance with trade-off theory. Business risk variable, though significant at 5% level exhibit a positive sign not predicted under either theory. On the whole, the results of the present study can be said to be more in line with the trade-off theory than the pecking order theory which is also the case with empirical studies in the Indian Corporate Sector such as Sahoo and Omkarnath (2005) and Mahakud (2006).

### 6.5 Step-wise Regression Analysis

Step wise regression analysis has been used to find out the explanatory variables contributing the most towards the variation in capital structure of Indian cotton textile industry. The most important factor explaining the variation in capital structure of cotton companies is liquidity. The positive sign of coefficient suggests that firms which are having more liquid resources are using less debt. The next important variable entering the final model is profitability, with positive coefficient which is significant at 5% level. The inverse relation between capital structure and growth opportunities suggest that it is supporting the trade

**Table 5: Explanatory variables and their relationship with Debt Ratio**

Variables	Definition	Expected Relationship		Actual Relationship	Beta (p values)
		Trade-off Theory	Peckingorder Theory		
Asset Structure	Fixed Assets/Total Assets	Positive	No specific relation	Positive	.052 (.766)
Profitability	Operating Profits/ Capital Employed	Positive	Negative	Positive	1.358*** (.001)
Growth Opportunities	Compound Average growth of annual sales/ Total Assets	Negative	Positive	Negative	-.344*** (.000)
Size of the firm	Natural Logarithm of Total Assets	Positive	Negative	Negative	.001 (.971)
Uniqueness	Selling and Distribution expenditure/ Total Sales	Negative	No specific relation	Positive	1.589* (.072)
Business Risk	S.D. of Operating Profits/ Average Operating Profits	Negative	Negative	Positive	.051** (.014)
NDTS	(PBDIT- I - T/ .34) / Total Assets	Negative	No specific relation	Positive	.884** (.035)
Liquidity	Current Assets/ Current Liabilities	Positive	Negative	Positive	.123*** (.000 )

\*\*\*. Significant at the 0.01 level (2-tailed).

\*\* . Significant at the 0.05 level (2-tailed).

\*. Significant at the 0.10 level (2-tailed).

off theory which means companies find debt too costly and difficult to finance its future projects. Thus, liquidity, profitability and growth opportunities together explain 98.8 percent of variability in the debt equity ratio. These results are summarized in Table 6 below. All the other variables got automatically excluded under step-wise regression analysis as their contribution to explanatory power of the model is negligible.

The ANOVA table corresponding to step-wise regression analysis is presented in Table 7. The regression sum of squares is highly significant at all the three stages.

## 7.0 SUMMARY AND CONCLUSIONS

For the study period of 2003-04 to 2007-08, profitability, growth opportunities, liquidity and business risk seem to be the most important determinants of debt equity choice in

**Table 6 : Step-wise Regression Results**

Variables	$\beta$	Std. Error	t	p values	R	R <sup>2</sup>	Adj. R <sup>2</sup>	Standard error of estimate
1. (Constant)	-.093	.028	-3.293	.002	.993	.985	.985	.2432
Liquidity	.124	.002	71.336	.000				
2. (Constant)	-.212	.040	-3.612	.001	.993	.986	.986	.2367
Liquidity	.125	.002	72.439	.000				
Profitability	.841	.391	2.290	.025				
3. (Constant)	-.221	.041	-4.075	.000	.994	.988	.988	.2188
Liquidity	.123	.002	72.112	.000				
Profitability	1.383	.379	3.740	.000				
Growth	-.323	.083	-3.704	.000				
Opportunities								

the Indian cotton textile industry, which are significant at 1 percent level, followed by uniqueness which is significant at 7.2 percent. Bhaduri's (2002) factor analysis model also comes out with growth, cash flow (equivalent

to our liquidity) and uniqueness as significant determinants of corporate borrowing. Profitability is one of the three important determinants in Sahoo and Omkarnath (2005) which is in agreement with our set. Profitability

**Table 7: ANOVA**

	Model	Sum of Squares	df	Mean Square	F	P values
1	Regression	301.086	1	301.086	5088.813	.000
	Residual	4.497	76	.059		
	Total	305.583	77			
2	Regression	301.380	2	150.690	2689.057	.000
	Residual	4.203	75	.056		
	Total	305.583	77			
3	Regression	302.037	3	100.679	2101.335	.000
	Residual	3.545	74	.048		
	Total	305.583	77			

and uniqueness are two important determinants in Kakani's study (1999) like ours but the former with a negative sign.

Going by the signs of independent variables, trade-off theory seems to be applicable, not so much the pecking order theory. This seems to be in agreement with other empirical work such as Sahoo and Omkarnath (2005) and Mahakud (2006). While the present study lends support to trade-off theory, we can not conclusively refute applicability of pecking order theory. For drawing any such conclusion the study may have to be extended for a larger time span and to other industries. Further application of more powerful statistical tests such as the ones attempted by Ghosh

(2004) is needed. Also analysis of responses from working executives on the preferences for raising capital to finance investment projects, obtained through mailed questionnaires / personal interviews will be of better help. Both the aspects are presently under investigation.

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