

Capital Structure Determinants of Indian companies

Sourav Sharma, Jaspreet Kaur

Department of Commerce, Chandigarh University

Abstract

This paper identifies the most determinant of capital structure of listed Indian firms comprising both private and public sector. It has been concluded that factors such as profitability, growth, asset tangibility, size, cost of debt, tax rate and debt serving capacity have significant impact on leverage structure chosen by firms in Indian context. This paper analyse the relationship the firm's capital structure and its information acquisition prior to capital budgeting decisions. In these industries leverage is negatively related to firm's incentive to acquire information during the capital budgeting process. The paper identifies the pattern of sources of funds for Indian corporate. The main focus of the paper is on the financing decisions of the firms and to investigate whether these issuance decisions are consistent with market timing behaviour or traditional theories notably trade-off and pecking order theories. The study also gives more importance to the effects of two major factors market performance and profitability of the firms in determining the type of finance that they issue. In order to increase the scope of drawing inference and differentiating between the theories of capital structures the dual issuers are included in the study as a separate issue type.

Key words: Capital structure, determinants, Indian companies

Introduction

Companies have been struggling with capital since for more than three decades. Some companies focus on the traditional tax benefit of debt. Since tax is often a tax deductible expense, while many companies hold substantial amount of cash and explore options of what to do with it the choice of capital structure for firms is by and large the most fundamental issue of the financial framework of a business entity. Methods by which public corporations finance their assets set up their ownership and reflects standard of their corporate governance. The current decades has many companies, financial institutions and government starting to over –leverage.

Objectives

The sub objectives for the research question are to:

- Identify the factors considered by companies before making financial decisions
- See how the these factors affect the value of the firm
- Understand how capital structure affects shareholder value
- See how capital structure reflects the future plans of the organisation
- What is capital structure of Indian companies?

Research methodology

Multiple regression analysis has been used, satisfying all itsfive assumptions i.e. the Normality Assumption Test, the Homoscedasticity Assumption Test, the Linearity Assumption Test of each of the independent variables with the dependent variable, the DurbinWatson d Statistic Test for detecting serial correlation and the Multicollinearity Test in trying to understand the significant and the insignificantvariables.

Data Source

The data is taken from secondary sources.

Literature review

Capital structure plays an important role in the business. It helps business to from where we raise funds .as we know that according to **MODIGILLANI –MILLER THEOREM**. The basic theorem states that in the absence of taxes, bankruptcy costs, agency costs, and asymmetric information, and in the efficient market, the value of firm is unaffected by how that is financed. His theory is often called as **capital structure irrelevance principle**.

Capital structure of Indian companies:

Basically it is the sample of non-government non-financial public companies. It tells me that

- Corporate have slowly moves towards internal sources as a preferred mode of capital.
- The debt ratio has become lower from 88.4 in mid-80's to 61.6 now
- Within external resources, bank borrowing increased and reliance on equity capital is lower.
- Debentures which found huge favour earlier in 90s is an absolute no-no
- Borrowing from FI(IDBI,IFCI etc.) has come down

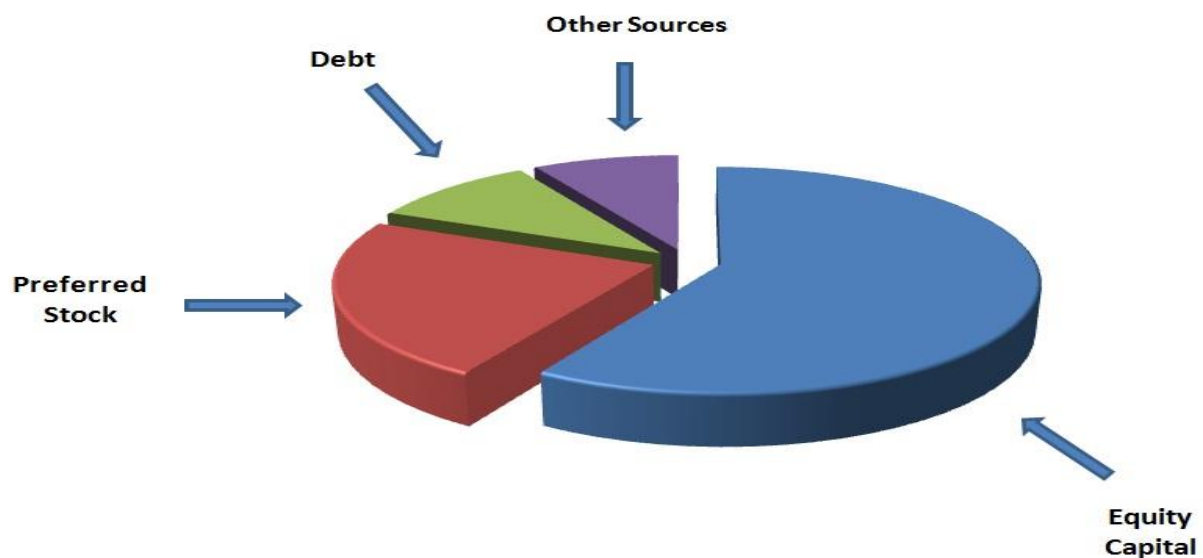
Table : Pattern of Sources of Funds for Indian Corporates (Per cent to total)					
1.	Internal Sources	31.9	29.9	37.1	60.7
2.	External Sources	68.1	70.1	62.9	39.3
	<i>of which:</i>				

	a) Equity capital	7.2	18.8	13.0	9.9
	b) Borrowings <i>of which:</i>	37.9	32.7	35.9	11.5
	(i) Debentures	11.0	7.1	5.6	-1.3
	(ii) From Banks	13.6	8.2	12.3	18.4
	(iii) From FIs	8.7	10.3	9.0	-1.8
	c) Trade dues & other current liabilities	22.8	18.4	13.7	17.3
	Total	100.0	100.0	100.0	100.0
<i>Memo:</i>					
(i)	Share of Capital Market Related Instruments (Debentures and Equity Capital)	18.2	26.0	18.6	8.6
(ii)	Share of Financial Intermediaries (Borrowings from Banks and FIs)	22.2	18.3	21.3	16.6
(iii)	Debt-Equity Ratio	88.4	85.5	65.2	61.6
Note : Data pertain to a sample of non-government non-financial public limited companies.					

Determinants of Capital structure

Financial Leverage or Trading on Equity: The use of long term fixed interest bearing debt and preference share capital along with equity share capital is called financial leverage or trading on equity.

Growth and Stability of Sales: The capital structure of a firm is highly influenced by the growth and stability of its sales.



Risk: There are two types of risk that are to be considered while planning the capital structure of a firm via (i) business risk and (ii) financial risk. Business risk refers to the variability to earnings before interest and taxes. Business risk can be internal as well as external. Internal risk is caused due to improper products mix non availability of raw materials, incompetence to face competition, absence of strategic management etc. internal risk is associated with efficiency with which a firm conducts its operations within the broader environment thrust upon it. External business risk arises due to change in operating conditions caused by conditions thrust upon the firm which are beyond its control e.g. business cycle.

Requirement of Investors: The requirements of investors are another factor that influences the capital structure of a firm. It is necessary to meet the requirements of both institutional as well as private investors when debt financing is used. Investors are generally classified under three kinds, i.e. bold investors, cautions investors and less cautions investor.

Capital Market Conditions (Timing): Capital Market Conditions do no remain the same for ever sometimes there may be depression while at other times there may be boom in the market is depressed and there are pessimistic business conditions, the company should not issue equity shares as investors would prefer safety.

Dependent variables

Total debt ratio (TDR):Total debt ratio is a financial ratio that indicates the percentage of a company's assets that are provided in comparison to debt. It is the ratio of total debt and total assets calculated by dividing total debt to total assets.

Long term debt ratio (LTDR): The long term debt to total asset ratio, at the simplest, indicates the portion of company's total assets that is financed from long term debt. The value varies from industry to industry and company to company. Comparing the ratio with industry peers is a better benchmark. Long term debt ratio is computed as long term debt/total assets.

Short term debt ratio (STDR): Short term debt is an account shown in the current liabilities of a company's balance sheet. This account is comprised of any debt or repayments incurred by a company that is due within one year. The debt in this account is usually made up of short-term bank loans taken by a company.

Independent variables

Profitability (PROF): Profitability is the financial benefit that is realized when the amount of revenue gained from a business activity exceeds the expenditure, costs, and taxes needed to sustain the activity

Growth (GROW): Firms with growth options are those that have relatively more capacity expansion projects, new product lines, acquisitions of other firms and maintenance, and replacement of existing assets.

Assets tangibility (TAN): Asset tangibility refers to all types of tangible assets (e.g. land, building, machines and equipment) that possess some degree of debt capacity.

Size (SIZE): Large firms are often more diversified and have more stable cash flows; the probability of defaults for large firms is smaller compared to smaller ones. Thus the financial distress risk can be considered lower for larger firms.

Cost of debt (COD): Cost of debt is the effective rate that a company pays on its current debt. This can be measured by either before- or after-tax returns. Since interest expense is deductible, the after-tax cost is seen most often.

Liquidity (LIQ): Liquidity is the ability to convert an asset to cash immediately. It is also known as “market-ability”. Liquidity was calculated by dividing the total current assets by the total current liabilities

Financial distress (FINDIST): Financial distress is a condition where a company has difficulty paying off its financial obligations to its creditors.

Tax rate (TAXR): Tax rate is a rate placed depending on the profit of a firm; different rates are used for different levels of profits.

Debt serving capacity (DSC): A high debt service capacity means that the firm can meet its interest obligation even if EBIT suffers a considerable decline. In other words, the higher the

debt coverage, the greater is the likelihood of a firm having a higher debt component in its financial structure.

Results

Results for regression analysis for Indian companies are given. As follows

	Indian companies		
	Short term debt ratio	Long term debt ratio	Total debt ratio
(Constant)	(-2.293)	(-16.71)	(-8.744)
PROF	-.114* (-3.229)	-.263* (-8.629)	-.320* (-11.096)
GROW	.014 (.398)	.121* (3.935)	.104* (3.584)
TAN	.089* (2.671)	.447* (15.016)	.360* (12.803)
SIZE	-.414* (-12.761)	-.007 (-.236)	-.187* (-6.745)
COD	.012 (.384)	-.078* (-2.786)	-.026 (-.970)
LIQ	.015 (.458)	.024 (.823)	.052 (1.914)
FINDIST	-.049 (-1.578)	-.050 (-1.773)	-.050 (-1.912)
TAXR	-.067* (-2.087)	-.093* (-3.222)	-.085* (-3.145)
DSC	-.143* (-4.354)	-.148* (-5.198)	-.209* (-7.745)
AGE	-.033 (-1.003)	.003 (.094)	-.003 (-.099)
R ²	.26	.337	.408

PROF: Profitability; GROW: Growth; TAN: Assets tangibility; SIZE: Size; COD: Cost of debt; LIQ: Liquidity; FINDIST: Financial distress; TAXR: Tax rate; DSC: Debt serving capacity; AGE: Age.
 The table reflects standardized coefficients and values in parentheses represent *t*-statistics adjusted using the procedures of [White \(1980\)](#). Significance at 5% level is indicated by one asterisk.
 Primary Data.

Conclusion

The findings contribute towards a better understanding financing behaviour in Indian companies during the period of 2001e2010. Hypotheses based on comparing the relationships between short term debt, long term debt, and total debt and 10 explanatory variables that represent profitability, growth, asset tangibility, size, cost of debt, liquidity,

financial distress, tax rate debt serving capacity, and age were developed to test which independent variable best explained the capital structure of Indian companies. Measures of the traditional factor that are hypothesized to affect financing decision of Indian companies namely, profitability, asset tangibility, size, tax rate, and debt servicing capacity have significant impact while raising short term debt; profitability, growth, asset tangibility, cost of debt, tax rate, and debt serving capacity have significant impact while raising long term debt; and profitability, growth, asset tangibility, size, tax rate, and debt serving capacity have significant impact while considering total debt while making capital structure decisions of Indian companies

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