CAPITAL STRUCTURE DECISIONS UNDER MULTIPLE OBJECTIVES: A STUDY OF INDIAN CORPORATES

by

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CERTIFICATE

This is to certify that the thesis titled **"Capital Structure Decisions under Multiple Objectives: A Study of Indian Corporates"** submitted by **Ms. Yamini Agarwal** at Indian Institute of Technology, Delhi, India for the award of the DOCTOR OF PHILOSPHY (Ph.D.) is a record of bonafide research work carried out by her. She has worked under our guidance and supervision. She has fulfilled the requirements for the submission of this thesis which has attained the standard required for a Ph.D. degree of this Institute. The results presented in this thesis have not been submitted elsewhere for the award of any degree or diploma.

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ABSTRACT

Capital structure decisions have become complex in the changing business paradigm. The evaluation techniques used for capital structure decisions by the theories and models developed in the 1950s have lost their relevance due to changes over the years. Capital is still scarce despite financial liberalization and globalization. Business environment are exceedingly competitive. Stakeholders are awfully demanding. Survival and growth is restrained by competition. Decision maker's choice on capital structures is not restricted to debt and equity alone. Bankruptcy and distress risk go beyond on balance sheet items including off balance sheet exposures. In the light of this background the premise of a single objective for evaluating capital structure decision is questioned in this study. The study explores the multiple considerations followed by decision maker for capital structure decisions.

The study investigates capital structure practices in the Indian industry through a sample of top 500 companies classified in 19 industries for a 10 year period (1998-2007) for 67 variables including the leverage variables. The spread of leverage ratio is also examined. The relationship of leverage ratios with market capitalization and EPS is also explored.

Multi objective criteria for processing capital structure decisions is identified and justified based on the findings of the past researches and the empirical survey conducted as a part of this study. In the empirical survey, CFOs as respondents are investigated for their goals, priorities, motivations, constraints and practices for capital structure decision making.

Goal Programming model was selected from different multi-objective optimization techniques. The model was found to be capable of providing satisficing solutions to multiple goals simultaneously by minimizing the deviation from the objective function after assuming that the decision maker is an optimist and does not attempt to satisfy all objectives fully. The study has applied this model to three firms in the Indian industry and discussed its results. The results give justification and validity to our basic premise of questioning the relevance of the single objective postulation in capital structure decisions.

The study has discussed a number of important issues which must be addressed well in the context of capital structure decisions under the multi-objective framework.

Keywords: Capital structure Decisions, Multiple objectives, Goal Programming Model

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