Chapter I

Introduction and Research

Design

#### CHAPTER I

## INTRODUCTION AND RESEARCH DESIGN

### 1.1 INTRODUCTION

Finance is regarded as the lifeblood of a business enterprise. In the modern economy, finance is one of the basic foundations for all kinds of economic activities. It is the master key to all the sources of management activities. Financial success of a firm depends mainly on its capital structure. Firms with unplanned capital structure may prosper in the short run, but face difficulties in mobilising additional funds in the long run. Every source of capital bears its own cost. The choice of debt and equity in the capital structure of corporate firms is one of the most important financial decision, which influence both the returns and risks of the shareholders. By using different choices of debt and equity, the profitability of a firm also gets affected. Thus, the management ought to have an optimal choice to generate a higher rate of returns.

An excessive use of debts may imperil the very survival of a corporate firm whereas non - use of debts prevents the firm from a situation to enhance the rate of returns to its equity shareholders. Though the debt creates a fixed financial charge, yet it is one of the cheapest sources of raise of funds, due to the tax treatment of interest. Retained earnings also have a less cost than the equity cost. By considering the different nature of each source of the capital structure which minimizes the overall cost of capital, thereby, giving the maximum benefits to the owners of a business. Thus, framing a focused capital structure and analysing its determinants is the very basic need to maximise the value of the firm.

## 1.2 STATEMENT OF THE PROBLEM

Service sector growth is governed by both the domestic and the global factors. India is a service oriented economy. India's service sector has grown considerably during the past few years and is globally recognized for its remarkable growth and development. The Indian facility management market, is expected to grow at 17 per cent CAGR (ibef)

between the years 2015 to 2020 which is also supported by hospitality sectors growth. It makes a direct and significant contribution to GDP and provide crucial inputs to the rest of the economy, thus, having a significant effect on the overall investment climate, which

is an essential determinant for the growth and development. These contributions and developments are achieved by the various companies of service sector. As the service sector companies grow over a period of time, due to various reasons like expansion, diversification and modernization, so the demand for raise of fund also increases.

To accomplish their requirements of fund, the corporate firms raise their funds from the diverse sources such as issue of shares, debentures, long term loans and ploughing back of earnings. The sources of funds and earning power may be the same for two or more comparable firms, still the profit on net worth may be different just because of the difference in the financial pattern of the firm. While raising funds, the companies have to make a choice between debt and equity capital. Capital structure is one of the important key factor of a firms' success. A balanced and effective capital structure is of a great concern, in the area of corporate finance. While developing an appropriate capital structure for the firm, the focus should be at maximizing the profitability and the market price of the share. The capital structure will be effective only when the firm earns satisfactory revenues by using its owner's fund and outsider's fund. It influences the shareholders' wealth. As a result, the market value of the share may be affected by the capital structure decision. Any change in the capital structure pattern affects the debt-equity mix, which in turn influences the cost of capital. Hence, capital structure influences earnings of the firm, investment decisions, value of a firm, operational efficiency, operating income, earnings available to shareholders etc. Consequently, these affects a value of the firm. Based on the above facts, the following questions are raised.

- 1. What are the different types of capital structure pattern followed by the service sector in India?
- 2. What are the internal and external variables that strongly influence the capital structure?
- 3. Is there any effect of capital structure on profitability of service sector?
- 4. Is there any influence of capital structure on the firm value of service sector in India?

Mostly, earlier studies on the Analysis of Capital Structure is limited to the analysis of determinant of capital structure of manufacturing sector only. Moreover, majority of the

studies have attempted to establish the relationship between firms' capital structure and specific determinants. Impact of capital structure on the firm value in service sector is not explored much in Indian context. Hence the present study is to analyse the impact of capital structure on firm value of service sector companies.

#### 1.3 OBJECTIVES

The basic purpose of the present study is to have a deep insight into the Indian service sector with regard to debt and equity financing to meet their fund requirements. To carry out the research, the following objectives are framed. The objectives are:

- 1. To study the pattern of capital structure of service sector in India.
- 2. To determine the factors that influence the capital structure of service sector in India.
- 3. To analyse the impact of capital structure on profitability of service sector in India.
- 4. To investigate the effect of capital structure on firm value of service sector in India.

## 1.4 SCOPE OF THE STUDY

The scope of the study is mainly related to the components of capital structure, determinants of capital structure and its impact on profitability and firm value of service sector of the Indian companies, for a period of 15 years i.e. from 2002-03 to 2016-17. The study will help the finance executives in appraising the genuine financial needs for their companies and in deciding an appropriate debt - equity mix to maximise the returns to all shareholders. The investors too, can take a rational judgement about the degree of financial risk and decide about their investment strategy, which will yield maximum returns. It also gives an insight to the management of the firm to maximize their value and neutralize the risk.

### 1.5 HYPOTHESES

Relevant null hypotheses has been framed, applied and tested wherever necessary.

## 1.6 RESEARCH METHODOLOGY

### 1.6.1 Data

The study is based on secondary data. The data required for the present study are drawn from the Centre for Monitoring Indian Economy (CMIE) PROWESS data base.

The PROWESS data base provides the data of audited balance sheets and profit and loss accounts of the reported enterprises.

# 1.6.2 Period of study

This study covers a continuous period of 15 years from the financial year 2002-03 to 2016-17.

## 1.6.3 Selection of sample

The objectives of the study are accomplished by using secondary data. The purposive sampling technique is used for selecting the sample. The study is confined to the non-financial service sector in India. Initially, eight service industries like communication, courier, healthcare, hotels, software, recreational, transport and miscellaneous are identified. The following parameters are taken for selection of sample under service sector.

- 1. The service industries which have more than 15 public companies.
- 2. The Public companies should have continuous financial data for the period of 15 years commencing from 2002-03 to 2016-17.
- 3. Companies which had debt equity ratio for continuous 15 years.

The samples satisfying the above criteria alone are considered for the study. Four service industries namely, courier, recreational, communication and miscellaneous are excluded from the list since they have less than 15 public companies and non-availability of continuous data for 15 years. Finally, based on the above parameters the companies identified across 4 service industries namely healthcare, hotels, software and transport are selected for the study.

Selected service companies have been diversified into 3 groups based on the 15 years of mean value of market capitalisation viz., large cap, mid cap and small cap. The basis for grouping is categorised as the companies with mean market capitalisation above 1000 crore have been classified as large cap companies. The companies with mean market capitalisation from 200 crore to 1000 crore have been classified as mid cap companies. Remaining companies with mean market capitalisation below 200 crore have been classified as small cap companies. Based on the categorisation of market capitalisation, upto five companies have been selected in each group under each category

of service sector. Hence for the present study, 60 companies have been selected from the chosen four service industries.

Based on the above category 15 companies have been selected in each sector. Hence for the present study 60 companies have been selected on the basis of data availability. The companies selected for the study are listed in Appendix I.

#### 1.7 FRAMEWORK OF ANALYSIS

Mathematical and statistical tools like ratios, mean, standard deviation, co efficient of variation, ANOVA, correlation, multiple regression analysis and step-wise regression analysis have been used for the purpose of testing the hypothesis and to draw the inferences.

#### 1.7.1 Mean

It is the arithmetic average across the distribution of the data set. It is calculated by totalling of all the values in the particular variable and then dividing the total by the total number of observation (N) in that variable field.

$$\mathbf{X} = \sum \mathbf{X} / \mathbf{N}$$

### 1.7.2 Standard Deviation

It is the root mean standard deviation of values from the arithmetic mean. In statistics, it is the most common measure of dispersion, which explains how widely the values in a data set are spread around the mean (i.e. uniformity in deviation). The following is the formula for calculating standard deviation.

$$s = \sqrt{\frac{\sum (x_i - \bar{x})^2}{n - 1}}$$

### 1.7.3 Co-efficient of variation

It is the ration of standard deviation to the mean and it is the most widely used relative measure of dispersion. While comparing two or more groups, the group, which has less coefficient of variation, is less variable or more constant or more stable or more homogeneous. On the contrary, the group which has more co-efficient of variation is more variable or less homogeneous. The formula for co-efficient of variation is  $\mathbf{CV} = \mathbf{SD} / \mathbf{Mean}$ .

## 1.7.4 Correlation Analysis

Correlation analysis is applied to study the relationship that exists between two variables in the study. The correlation co-efficient of the selected independent variables with the dependent variable has been worked out in order to identify the most important variable, which have relationship with the dependent variable.

$$r = \frac{1}{n-1} \sum_{i=1}^{n} \frac{(x_i - \overline{X})(y_i - \overline{Y})}{s_x s_y}$$

## 1.7.5 Regression analysis

Regression analysis is the statistical technique that identifies the relationship between two or more quantitative variable whose value is to be predicted and an independent or explanatory variables about which knowledge is available. The technique is used to find the equation that represents the relationship between the variables.

# 1.7.6 Analysis of Variance and Covariance

One-way analysis of variance is a technique used to compare means of two or more samples. This technique can be used only for numerical data. The ANOVA tests the null hypothesis that samples in two or more groups are drawn from populations with the same mean values. The ANOVA produces an F-statistic, the ratio of the variance calculated among the means to the variance within the samples. If the group means are drawn from populations with the same mean values, the variance between the group means should be lower than the variance of the samples. A higher ratio therefore implies that the samples are drawn from populations with different mean values.

## 1.8 SIGNIFICANCE OF THE STUDY

This study explores the debt- equity structure and determinants of capital structure of service sector. In addition to that the study analyses the impact of capital structure components on profitability and on the firm value of service sector. This research will help the companies to re-plan their financial structure and expand their services by using strong liquid position to have an edge over the competitors. The investors will take a rational judgment about the degree of financial risk and decide on their possible investment strategy,

which will yield maximum return to their investment. It would enable the shareholders, investors and investment analysts to identify the determinants of corporate capital structure. Further, it would provide an insight to banks, financial institutions and long-term lenders to understand the financial structure and effectiveness of credit worthiness of the companies, moreover, it would open up new vistas to the industry association and the government in understanding the characteristics of the companies for inter and intra- firm comparison. It might also help the academic researchers, researchers in capital market instruments, researchers in industry and company by providing different perspective of the analysis.

### 1.9 LIMITATIONS OF THE STUDY

- 1. This study is based on secondary data taken from published annual reports of select companies and as such its findings depends entirely on the accuracy of such data.
- 2. Due to lack of continuous date and non-availability of data, the study imposed to only sixty companies.
- 3. The study does not consider some of the external factors like market size and exchange rate which may likely affects the capital structure of a firm.

#### 1.10 CHAPTER SCHEME

The study report is presented in eight chapters. The detailed chapter plan is given below:

**Chapter I** deals with introduction, statement of the problem, scope of the study, objectives of the study, research methodology, statistical tools used for the study and limitations of the study.

**Chapter II** contains a review of existing literature on capital structure.

**Chapter III** gives a theoretical overview of capital structure and service sector.

**Chapter IV** is concerned with the analysis on components of capital structure

**Chapter V** focuses on the variables determining the capital structure of service sector.

**Chapter VI** examine the effect of capital structure components on profitability of service sector.

**Chapter VII** discusses the impact of capital structure components on firm value.

**Chapter VIII** deals with the summary of findings, suggestions and conclusion.