Abstract

The main aim of any business is to minimize the cost of capital and to maximize the value of the firm. So this study tends to analyze the Capital structure and value of the firm. The objectives of the study are to study the relationship between Capital structure and value of the firm and also to determine the impact of Capital structure on the value of the firm of the select steel companies in India. For the purpose of this study, top five Steel companies were selected based on purposive sampling method on the basis of market capitalization. The study covers a period of ten years from 2007-08 to 2016-17. The study applied Correlation and Linear regression analysis. The study found that there exist a significant relationship between Capital structure and Value of the firm and there is a significant impact of Capital structure on the value of the firm of the select Steel companies in India during the study period.

Keywords: Capital structure, Long term debt, Value of the firm

JEL CLASSIFICATION: G31, G32

I. INTRODUCTION

Business is all about investment and profit making. All businesses should have capital in order to maintain their operations and to purchase the needed assets. Business capital comes in two forms namely debt and equity. Debt refers to a loan or credit that can be repaid in the near future. On the other hand, Equity refers to a fund where the investors own a position in the company. Tradeoff between debt and equity refers to Capital structure. An optimal capital structure is said to have a balance between risk and return. The objective of a business should be to maximize its value by maintaining its financial leverage from the point of view of its impact on the value of the firm. Capital structure decisions are very much significant as it affects the market value of the firm. A firm is said to be an unlevered firm when there is no debt in its capital structure, whereas a firm is said to be a levered firm when there is debt in its capital structure. Capital structure of a firm influences the shareholders return and risk which in turn influences its market value. Capital structure theories say that decisions on the proportions of debt and equity optimize the value of the firm and it also minimizes the cost of capital. Financial experts believed that increasing the proportion of debt in a company’s capital structure, it would increase the value of the firm to a certain point. But beyond a certain point it would increase the company’s cost of capital and at last it decreases the market value of the firm. In this study, Enterprise value is used as the comprehensive proxy for value of the firm (Saurabh Chadha & Anil K Sharma), whereas long term debt and equity acts as a proxy for Capital structure.

II. LITERATURE REVIEW

Ammara Asif & Bilal Aziz (2016), in their study entitled “Impact of Capital structure on Firm value creation—Evidence from the Cement sector of Pakistan” analyzed the impact on value creation in 20 companies in Pakistan. Economic value added is used as a proxy in analyzing the value of the firm. Panel data techniques like ordinary least square, fixed effects model and random effects model were used in the study. The study also shows that economic value added is positively related to Capital structure. The study also suggests that companies should have a perfect blend between debt and equity.

Divya Aggarwal & Purna Chandra Padhan (2017), in their study entitled “Impact of Capital Structure on Firm Value: Evidence from Indian Hospitality Industry” empirically analyzed the relationship between Capital structure and Value of the firm by using correlation coefficients. They also determined the impact of Capital structure through three regression equations using Enterprise value, Market Capitalization and Price to book ratio. The study shows that the theory of Modigliani and Miller seems irrelevant for Indian Hospitality sector and the study reflects the trade off theory.

Priya, Nimalathasan & Piratheepan (2015), in their study entitled “Impact of Capital Structure on the Firm Value: Case study of listed manufacturing companies in Sri Lanka” studied the value of the firm and Capital structure during the year 2008 to 2015. Correlation and Regression analysis were used to analyze the framed objective using Stata software package. The results revealed that Earnings per share are negatively related to Debt equity ratio and the study also reveals that Capital structure has an impact on the value of the firm. The study also suggests that Sri Lankan market should facilitate more of debt capital.

III. STATEMENT OF THE PROBLEM

A decision related to Capital structure of a firm, no matter if it is a small concern or a giant corporation, has always been an ardent issue for the management. Likewise a capital structure decision affects the value of the firm. Modigliani and Miller’s irrelevance theory (1958 and 1963) says that financial leverage is not related to firm value under the assumptions of perfect capital market (no bankrupt cost & without taxes). Later, when tax and interest payments are considered, value of the firm and financial leverage are positively related to each other. Other traditional theories which are developed later, like trade off theory, pecking order theory, and agency theory also demonstrated that value of the firm can be affected by the decisions made on Capital structure. In a developing economy like India, it is very vial to acquire funds economically and allocate them effectively for the growth of the business as well as the growth of the nation. Hence, there arises a need to
understand capital structure and how it affects the value of the firm. So, with the support of the above said theories, the researcher tend to study the relationship between Capital structure and value of the firm & the impact of Capital structure on the value of the firm of the select steel companies in India.

**OBJECTIVES OF THE STUDY**

1. To measure the relationship between Capital Structure and Value of the firm of the select steel companies.
2. To determine the impact of Capital structure on the Value of the firm of the select steel companies.

**IV. METHODOLOGY OF THE STUDY**

**Sources of Data**
The study purely depends on the secondary data which are collected mainly from the Annual reports of the select top five Steel companies in India and also from various journals and Websites.

**Sampling Design**
Steel companies for this study were selected based on purposive sampling method, among the companies listed with the stock exchange, top 5 companies in India were taken for the study on the basis of their market capitalization. The study covers a period of ten years from 2007-2008 to 2016-17.

The following are the select Steel companies:
- JSW Steel
- Tata Steel
- Steel authority of India ltd (SAIL)
- Steel Exchange
- Jindal Steel

**Statistical Tools Used**
Correlation Analysis has been used to find the relationship between Capital structure and Value of the firm, while Regression Analysis has been used to determine the impact of Capital structure on the value of the firm of the select steel companies.

**V. ANALYSIS AND INTERPRETATION**

**Correlation Analysis of Steel Sector**

H₀₂ – There is no significant relationship between Capital structure and value of the firm of the select steel companies.

Table 1 shows the Correlation coefficient value of the select Steel companies from the year 2007-08 to 2016-17. The above table reveals that Steel Exchange and Jindal Steel have a correlation coefficient value of 0.953 and 0.950 which indicates that Capital structure and value of the firm are positively related to each other. Steel authority of India and Tata Steel has a correlation coefficient value of 0.908 and 0.890. JSW steel has a coefficient value of 0.784, and so it is said to have a moderate relationship with each other. All the select steel companies are positively related to each other, which indicate that if Capital structure of a firm increases, value of the firm also increases. If Capital structure of a firm decreases, value of the firm also decreases and vice versa. The P-value for all the select steel companies is significant at 1 percent level, so the null hypothesis is rejected. Hence, it can be concluded that there is a significant relationship between Capital structure and Value of the firm of the select Steel companies.

**Linear Regression analysis of Steel Sector**

H₀₂ - There is no significant impact of Capital structure on the value of the firm of the select steel companies.

Table 2 shows the regression analysis of select Steel companies from the year 2007-08 to 2016-17. R squared value of JSW Steel (0.614) states that Capital structure has 61.4 percent impact on the value of the firm, while value of Tata Steel (0.792) indicates that Capital structure has 79.2 percent impact on the value of the firm. R squared value of Steel authority of India (0.824) states that Capital structure has 82.4 percent impact on the value of the firm. R squared value of Steel Exchange (0.908) states that Capital structure has 90.8 percent impact on the value of the firm while the value of Jindal Steel (0.903) indicates that Capital structure has 90.3 percent impact on the value of the firm. The P-value of all the select companies is less than 0.05 and so the null hypothesis is rejected. It can be concluded that there is a significant impact of Capital structure on the value of the firm of the select Steel companies.

**VI. CONCLUSION**

In the year 2017, India became the third largest producer of crude steel in the world as the manufacturers have strengthen the capacity of steel production with a view of rise in demand. For the year 2017-18, export of
steel in India increased from 8.20 million tonnes to 9.62 million tonnes with an increase of 17 percent. Steel authority of India, Tata steel, and JSW steel are the key players of Steel industry in India. Also Steel industry is said to be one of the highly capital intensive industry in India as it involves huge capital. Any decision relating to this sector will affect the firm’s value, shareholders wealth and as the economy as a whole. So, an attempt has been made to study the relationship between Capital structure & value of the firm and to study the impact of Capital structure on the value of the firm of the select steel companies in India. The results of the study reveal that there is a significant impact of Capital structure on the value of the firm.

REFERENCES


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