CAPITAL STRUCTURE AND PROFITABILITY

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ABSTRACT

A firm's capital structure means the proportion of debt and equity financing. The optimum level of debt or the financial leverage, is however very difficult to decide on. On one hand, it offers interest tax shield and on the other it increases risks related to bankruptcy. Modigliani and Miller have done exemplary work on the topic of optimum capital structure. Accordingly, organization's ideal capital structure ought to be the judicious mix between the tax cuts that are related with the utilization of debt capital, and the costs related with the potential for bankruptcy of the firm. Summarily, financial leverage is a doubly-edged sword.

Keywords: *capital structure, leverage, debt, equity, bankruptcy*

Introduction

A firm needs financial capital to run its business. For most firms, the required capital is raised by issuing debt or selling equity. The quantum of debt & equity which forms a firm's capital structure has several risk & return implications. Therefore, a firm must use a detailed and prudent process for deciding on the target capital structure. The capital structure is how a company finances its operations & growth by tapping different sources of funds.

Financial leverage is the amount of debt and preferred stocks used in a firm's capital structure. Leverage assumes importance as interest is tax deductible expense according to income tax laws and provides interest tax shield. Moreover, the leverage has a positive effect when assets purchased using debt financing earns more return as compared to the cost of debt. Due to the above mentioned two reasons, deploying financial leverage increases the firm's profitability. Having said that, if the firm does not have enough taxable income to shield, or in case operating income is lower than a threshold, financial leverage lowers the equity value and therefore the value of the firm.

Given the significance of an organization's capital structure, the initial phase in the capital decision-making measure is for the administration of an organization to choose how much outside capital it should raise to operate its business. Once this sum is resolved, the board needs to inspect the financial business sectors to decide the terms in which the organization can raise capital. This progression is significant process in light of the fact that the market environment may shorten the capacity of the organization to issue debt or common stock at an appealing level or cost.

All things considered, once these questions have been answered, the management of an organization can plan the capital structure strategy and construct a package of financial instruments that should be offered to investors. By following this process, the board's financing decision ought to be carried out as per its long-term strategy, and how it needs to develop the organization over the long term.

Literature Review

There is ample research available on the topic of relationship between capital structure and profitability. Below are a few abstracts from the recent literature.

Singh and Bagga (2019), have posited that, quite possibly the most puzzling issues looked by finance managers is to think about the impact of capital structure on the profitability of firm. Numerous investigations have been done to analyze the impact of capital structure on the profitability of firms, however the vast majority of them have a place with different parts of the world, and just couple of studies have been directed in India. Accordingly, the current examination has been embraced to assess the impact of capital structure on the profitability of Nifty 50 organizations recorded on National Stock Exchange of India from 2008 – 2017. The data has been investigated by utilizing descriptive statistics, correlation and multiple panel data regression models. Four distinct regression models have been utilized to consider the connection between capital structure and profitability. In these models, we study the individual impact of total debt and total equity proportions on profitability, that is, ROA and ROE. Each of the four models have been tried with pooled OLS, fixed effects, and random effects. We reason that there is significant positive effect of capital structure on firm's profitability.

Chandra et al. (2019), have argued that, the reason for this investigation is to analyze the variables that impact capital structure, profitability and stock returns and the connection between capital structure, profitability and stock returns. The endogenous variables in this examination are capital structure, profitability and stock returns, while the exogenous variables are firm size, growth opportunity, tangibility, liquidity, volatility and uniqueness. The populace utilized is an organization that is listed on the compass index 100 during August 2016. An aggregate of 64 organizations are inspected in this examination. The unit of analysis is 448 data. The data analysis procedure utilized is path analysis with the assistance of AMOS. The outcomes show just profitability variables influence stock returns. Variable capital structure, firm size, growth opportunity, tangibility and liquidity have no critical impact.

Chang et al. (2019), have opined that, capital structure is one of the hotly debated issues in corporate finance. To address the issues of stakeholders, firms need to fabricate a capital structure that is attractive for investors by lowering financial risk and expanding their profitability. Consequently, the point of this examination is to explore the relationship between capital structure and profitability. In analyzing the relationship between capital structure and profitability, we apply correlation and regression analysis on dataset from 2003 to 2016 for the firms in the Four Asian Tiger economies. This examination discovers a significantly negative relationship among leverage and profitability, a significantly positive relationship among growth and leverage in Taiwan, Korea and Hong Kong and a significantly positive relationship among size and leverage in every country.

According to Chen et al. (2019), operating leverage builds profitability and diminishes optimal financial leverage. Along these lines, operating leverage produces a negative connection among profitability and financial leverage that is believed to be conflicting with the trade-off theory yet is ordinarily seen in the data. We exhibit the impact of operating leverage on firms' profitability and financial leverage, just as on the observational connection among profitability and financial leverage, by utilizing China's entrance into the World Trade Organization in 2001 and its impact on the capital labor ratio of U.S. firms.

According to Rahman et al. (2019), this exploration investigates the effect of capital structure on the profitability of publicly traded manufacturing firms in Bangladesh. In this paper, we applied the fixed effect regression to discover the correlation among independent variables (debt ratio, equity ratio and debt to equity ratio) and dependent variables (return on asset, return on equity and earnings per share). An example of 50 observations of chose 10 manufacturing organizations recorded in Dhaka Stock Exchange has been broke down over the period of 2013 to 2017. This exploration uncovers that the debt ratio and equity ratio have a significant positive effect however debt to equity ratio contrarily affects ROA. This paper additionally uncovered that, equity ratio has a significant positive effect yet debt to equity ratio contrarily affects ROE. At last, debt and equity ratio contrarily affects EPS.

Moreover, Dang et al. (2019), Noreen (2019), Toumi (2019), Utami (2019) and Wassie (2020), have dealt with relationship between capital structure and profitability.

Optimal Capital Structure

The investigation of an organization's ideal capital structure traces all the way back to 1958 when Modigliani and Miller published their Nobel Prize-winning work "The Cost of Capital, Corporation Finance, and the Theory of Investment." As a significant premise of their work, Modigliani and Miller showed that under conditions where corporate income taxes and distress costs are absent in the business environment, the utilization of financial leverage doesn't influence the value of the organization. This view, known as the Irrelevance Proposition hypothesis, is one of the main pieces of scholastic theory at any point.

However, the Irrelevance Theorem, requires some unfeasible assumptions that should be acknowledged to apply the theory in a genuine environment. In recognition of this issue, Modigliani and Miller expanded their Irrelevance Proposition hypothesis to incorporate the effect of corporate income taxes, and the expected effect of distress cost, for reasons for deciding the ideal capital structure for an organization.

Their reexamined work, generally known as the Trade-off Theory of capital structure, puts forth the defense that an organization's ideal capital structure ought to be the judicious harmony between the tax cuts that are related with the utilization of debt capital, and the costs related with the potential for bankruptcy for the organization. Today, the reason of the Trade-off Theory is the foundation that corporate administration should use to decide the ideal capital structure for an organization.

Summarily, corporate management uses financial leverage essentially to expand the organization's earnings per share and to build its return-on-equity. In any case, with these benefits come higher earnings variability and the potential for an increment in the cost of financial distress, perhaps even insolvency.

In view of this, the management of an organization should consider the business risk of the organization, the organization's tax position, the financial flexibility of the organization's capital structure, and the organization's level of managerial aggressiveness while deciding the ideal capital structure.

Conclusion

A firm's capital structure means the proportion of debt and equity financing. What is the optimum amount of debt or the financial leverage in the overall capital structure, is however, a very complex question. The presence of debt capital has two benefits. First, the interest is a tax-deductible expense and hence offers interest tax shield. Second, the leverage has a positive effect when assets purchased using debt financing earns more return as compared to the cost of debt. As such, higher the leverage higher is the profitability. However, it comes with a certain cost – high leverage increases the bankruptcy risk.

Modigliani and Miller have done exemplary work on the topic of optimum capital structure. They formed the hypothesis that the capital structure of the firm does not impact its value. However, in the light of taxes and financial risks, they modified their theory which is known as the tradeoff theory. Accordingly, organization's ideal capital structure ought to be the judicious mix between the tax cuts that are related with the utilization of debt capital, and the costs related with the potential for bankruptcy of the firm. Summarily, financial leverage is a doubly-edged sword.

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