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Introduction

Every experienced organization knows when debt capital is more suitable for them and from which sources they should collect their debt funds. Every financial expert should consider some factors before they will use debt funds. First of all, the impact of using leverage to the sales revenue of the organization. If the debt financing increase, the sales revenue of the firm will increase that indicates the positive potential profitability of a company. In other sense, if the leverage drop off the sales revenue of the company that indicates the potential losses of a company. Secondly, the financial manager should consider that, the use of debt funds will increase the return or not. If the return of the firm will increase, the value of the firm will increase that indicates the wealth maximization of the company. The debt overhangs theory of Myers [1]

To find out the impact of leverage on risk.

2. To find out the relationship between leverage and risk.

Literature Review

Business expansion more or less heavily depends on borrowed money or leverage in present competitive world. Most of the people use debt to finance operations because it can increase the investment without increasing equity capital in the business. It helps both the investor and the organization to invest or operate their business activities. In this business world, the firm can use leverage to try to make wealth of shareholder, but if they can't do so, the interest expense and credit risk of default destroy shareholder value.

Previous concept regarding leverage, risk and return

Earlier studies have used several definitions for returns and

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leverage. Gahlon [3] said that returns as profits after tax and ratio of book value of equity to assets as an indicator for leverage. His results indicate that leverage has a negative relation with returns. Weston and Brigham told some of today's businessmen and women that, "High fixed costs and low variable costs provide the greater percentage change in profits both upward and downward". Arditti [4] describe returns as the geometric mean of returns. He finds a negative though insignificant relation between leverage and stock returns. Hamada [5] calculates returns as profits after taxes and interest which is the earnings the equity and preferred shareholders receive on their investment for the period. He tests the relationship in the cross section of all firms. He uses industry as a proxy for business risk since his sample lacks sufficient firms to yield statistically significant coefficients. Schultz and Shultz [6], said that, "Since a fixed expense is being compared to an amount which is a function of a fluctuating base (sales), profit-and-loss results will not bear a proportionate relationship to that base. These results in fact will be subject to magnification, the degree of which depends on the relative size of fixed costs vis-a-vis the potential range of sales volume.

This entire subject is referred to as operating leverage". Brigham says that, "If a high percentage of a firm's costs are fixed, and hence do not decline when demand decreases, this increases. This factor is called operating leverage [7]. If a high percentage of a firm's total costs are fixed, the firm is said to have a high degree of operating leverage. The degree of operating leverage (DOL) is defined as the percentage change in operating income (or EBIT) that results from a given percentage change in sales....In effect, the DOL is an index number which measures the effect of a change in sales [number of units] on operating income, or EBIT [7]. Cherry said that, "Operating leverage, then, refers to the magnified effect on operating earnings (EBIT) of any given change in sales...And the more important, proportionally, are fixed costs in the total cost structure, the more marked is the effect on EBIT". Archer and D'Ambrosio [8] in their 1972 textbook said that, "The higher the proportion of fixed costs to total costs the higher the operating leverage of the firm..."

Buccino and McKinley [9] define operating leverage as the impact of a change in revenue on profit or cash flow. It arises, they say, whenever a firm can increase its revenues without a proportionate increase in operating expenses. Cash allocated to increasing revenue, such as marketing and business development expenditures, are quickly "Consumed by high fixed expense" Bhandari [10] defines stock returns as inflation adjusted. He includes all firms including financial companies in his sample, whereas he excludes financial companies from his sample due to the lack of ambiguity of the treatment of leverage in financial companies. He conducts his tests in the cross section of all firms without assuming different risk classes, whereas his conduct or tests for each risk class separately. In his study, he represents returns to shareholders as equity returns in excess of risk free for a period of one year.

Arditti [4] who finds a negative though insignificant relation between leverage and stock returns define leverage as the ratio of debt measured in book value to equity measured at market value. Baker [11] measures leverage as the ratio of equity to total assets for the leading firms in an industry over a one year period. He finds that at the industry level, leverage raises industry profit rates, more leverage implying greater risks. In his study he used book values of debt and equity in defining the capital structure [12]. Garrison [13] said that

Y= Return (pro t)

X1 = sales revenue

X3 = EPS

X5 = EVA

μ_i = error term

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = regression coefficient

β_0 = intercept

X2 = share price

X4 = EBITI

Table 2 represents the overall F statistic is statistically significant at the 8.47061E-08 level. The regression equation with $R^2 = 0.8111$ explains 81.11% variance in returns (pro t) with adjusted R^2 of 71.95%.

Conclusion

Leverage magnifies the effect of change in Sales revenue, EBIT, EPS and Pro t etc. of the firm. It mainly involves the effective utilization of debt fund obtained at a fixed cost in the hope of increasing the return to the shareholders in future. The leverage is employed by every company is intended to earn more return on the fixed charge funds than their cost. The greater revenue in compare with the expenses regarding debt financing will enhance the net income of the organization. In other way, the poorer returns in contrast with the expenses regarding leverage will reduce the net income of the company. This research activity found that there are positive impacts of leverage with Sales revenue, Earnings before Interests and Taxes and EPS (Earning Per Share) of the firm.

This study illustrates that debt financing also increase share price of the firm which indicates positive pro t earning ability as well as wealth maximization. This thesis paper explore that the leverage can able to enhance the Financial Risk of the firm which indicates recovery of loss in terms of loan is very difficult to the firm because in general there are limited sources of alternative funding and business insurance policy is not popular in Bangladesh. It also found that high interest rate and unethical political influence negatively manipulate the profitability of the firm. The Firms that used leverage have increase investment capacity as well as enjoy the tax exemption facility. This research also found that there are limited source of debt capital and cost of capital is relatively high for this reason most of the small firm cannot prefers to get debt. From this study it is clear that there are impacts of leverage on risk and return of companies' in Bangladesh.

1. Myers SC (1977) Determinants of corporate borrowing. J Financ Econ 5: 147-175.
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