Impact of Capital structure on Profitability – A study on Tata Motors

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Abstract

The capital structure deals with amount of debt and equity to finance the firm’s operation. This study shows the relationship between capital structure and profitability of Tata motors. Here it is says there is strong relationship between capital structure and profitability. Increase or decrease in the capital structure determines the increase or decrease in the profitability of firm. It results with significant and insignificant impact of selected capital structure variables on firm’s profitability. The study found that, there is a significant impact of capital structure variables on profitability except debt to total assets which has shown a negative correlation with the net profit. It is also found that all Return Ratio paired mean results positive due to high rate of return.

Key words: Profitability, Capital structure, Returns.

Introduction

Capital structure refers to the proportion of equity vs. debt financing that a firm utilizes to carry out its operations and grow.

Capital structure plays an important role in any type of a business. Capital structure decisions are vital as they to a large extent determine the profits earned by a firm. While making a choice of the capital structure the future cash flow position should be kept in mind. Debt capital should be used only if the cash flow position is really good because a lot of cash is needed in order to make payment of interest and refund of capital.

There are many factors which effect the capital structure of the firm:

- Financial Leverage or Trading on Equity
- Expected Cash Flows
- Stability of Sales
- Control over the Company
- Flexibility of Financial Structure
- Cost of Floating the Capital
- Period of Financing
- Market Conditions

In this study, an attempt has been made to analyse the financial data of Tata motors for the period range of March 2021 to March 2019 in order to establish the relationship between the capital employed and profitability. The analysis is done with the help of descriptive statistics and correlation analysis.

Literature Review

Anup Chowdhary, Suman Paul Chowdhury (2010) This study endeavours to empirically support the argument of MM. The paper tests the influence of debt equity structure on the value of shares given in different sizes, industries, and growth opportunities with the companies, listed in Dhaka Stock Exchange and Chittagong Stock Exchange of Bangladesh. To see the relationship between capital structure and firm value in Bangladesh this paper is considered. This paper also suggests that maximizing the wealth of shareholders requires a perfect combination of debt and equity.
Faris Nasif Al-Shubiri (2012) He opined that if an organization wants to invest on an assets, then it should be on past performance through debt ratio analysis. This study investigates the debt accumulation and its impact on the firm performance and investment on assets. E.C. Charalambakis and D. Psychoyios (2012) Here it is suggested that a size, tangibility, profitability and growth opportunity signifies the debt ratios. As with the US evidence it has been shown that, size and tangibility are positively associated with leverage, whereas profitability and growth opportunities are negatively associated with leverage for the UK firms remain inconclusive. It is concluded that size, tangibility, profitability and growth opportunity cannot explain the theoretical aspects of capital structure.

According to trade off theory propounded by Modigliani & Miller (1958), profitable firms prefer debt financing to equity for the of profits. This theory is based on three forces (Raheman, Zulfiquar & Mustapha, 2007). A firm having more debts in the capital structure enjoys higher tax benefits and their tax liabilities become lower and, in some cases, may be waived off. Some firms having more profits go for debt than to equity in order to take advantage of the interest deduction in taxation. A company having low profits faces problems of bankruptcy. Hence, if the company takes on more debt, there are chances of it going bankrupt faster and as a result, investors are not expected to have trust on the firm. In these cases, a firm may go in for more equity.

Myers (1984) in his study, developed the pecking order theory, which identifies that the capital structure of firms range from internal financing to external financing. He identified internal financing to include retained earnings while the external financing includes debt financing and equity financing. Their model argues that the capital structure of a company ranges from share capital, retained earnings and debt financing.

**Objective of the study:**

To study the correlation between the profitability and the returns on the various capital sources.

To analyse the impact of capital structure on profitability of firm.

**Research methodology:** This study has used secondary data for the study. Data was collected from the financial statements of the company.

**Data Analysis**

<table>
<thead>
<tr>
<th>Years</th>
<th>Debt to equity ratio</th>
<th>Net profit (Rs cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>2.3269</td>
<td>2395.44</td>
</tr>
<tr>
<td>2020</td>
<td>1.867</td>
<td>-7286.63</td>
</tr>
<tr>
<td>2019</td>
<td>1.6788</td>
<td>2020.6</td>
</tr>
<tr>
<td></td>
<td>r = 0.2683</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows the correlation between the debt to equity and the net profit. There is a positive correlation between debt-to-equity ratio and the net profit. Correlation of 0.2683 indicated that the correlation is very strong.
Table 2

<table>
<thead>
<tr>
<th>Years</th>
<th>Return on capital employed</th>
<th>Net profit (Rs cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>0.0129</td>
<td>2395.44</td>
</tr>
<tr>
<td>2020</td>
<td>-0.0412</td>
<td>-7286.63</td>
</tr>
<tr>
<td>2019</td>
<td>0.0124</td>
<td>2020.6</td>
</tr>
<tr>
<td>r=</td>
<td></td>
<td>0.999</td>
</tr>
</tbody>
</table>

Table 2 shows the correlation between the return on capital employed and the net profit. There is a positive correlation between return on capital employed and the net profit. Correlation of 0.999 indicated that the correlation is very strong. Return on capital employed depends on the net profit.

Table 3

<table>
<thead>
<tr>
<th>Years</th>
<th>Return on Assets</th>
<th>Return on fixed assets</th>
<th>Debt to the total assets</th>
<th>Net profit (Rs cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>0.139</td>
<td>0.243</td>
<td>0.374</td>
<td>2395.44</td>
</tr>
<tr>
<td>2020</td>
<td>0.14</td>
<td>0.223</td>
<td>0.365</td>
<td>-7286.63</td>
</tr>
<tr>
<td>2019</td>
<td>0.233</td>
<td>0.233</td>
<td>0.3288</td>
<td>2020.6</td>
</tr>
<tr>
<td>Correlation</td>
<td>0.46</td>
<td>0.875</td>
<td>-0.297</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows the correlation between return on assets, return on fixed assets, Debt to total assets to net profit. There is a low positive correlation between the return on assets and the net profit. There is a high positive correlation between the return on fixed assets and the net profit but coming to debt to the total assets and the net profit there is a negative correlation between them.

Conclusion

It is observed that nearly 40% of the assets of the company are funded by debt.

The correlation analysis indicates positive relationship between debt variable and profit but slightly negative correlation among other variables.

It can be inferred that when the profits are positively correlated to capital ratios and short term debt ratio is positively related to profitability ratios, the slight negative correlation is brought about by the long term debt of the companies. It can be concluded that if the industry slightly reduces its component of long term debt and increases the equity, then there will be positive correlation among the variables.

References: