



## CAPITAL STRUCTURE AND ITS IMPACT ON PROFITABILITY – A STUDY OF INDIAN HOTEL INDUSTRY

Ms. Shireen Rosario\* Dr Kavita Chavali\*\*

\*Lecturer, Department of Accounting , College of Commerce and Business Administration, Dhofar University, Salalah, Sultanate of Oman.

\*\*Associate Professor, Department of Finance and Economics, College of Commerce and Business Administration, Dhofar University, Salalah, Sultanate of Oman.

### Abstract

Capital structure plays an important role in service sector like hotel industry. Capital structure decisions are vital as they to a large extent determine the profits earned by a firm. In this study, an attempt has been made to analyze the financial data of 22 companies in hotel industry in India 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, in order to establish the association among variables. It is observed that nearly 58% of the assets of the industry are funded by debt, indicating that the industry is not highly geared. The correlation analysis indicates positive relationship between debt variable and profit but slightly negative correlation among other variables.

**Keywords:** Capital Structure, Correlation, Hotel Industry, Service Sector.

**JEL Classifications:**G32, D25

### Introduction

Hospitality Industry is one of the key drivers of growth among the service sector in India. Tourism in India accounts to 9% of the GDP Gross Domestic Product. Tourism and Hospitality sectors direct contribution to GDP is US \$71.53 billion in 2016 (Source: World Economic Forum Report). India, after China is one of the most lucrative hotel industry in the world. The growing economy, growing affluence of people, higher disposable incomes and a burgeoning middle class have boosted the demand in hotel industry in India. Added to this is India becoming a medical tourism destination for people all around the world. With the rise in the number of global tourists and realizing India's potential, many companies have invested in the tourism and hospitality sector. The demand for hotels is only going to increase in the future, especially from the mid-market and budget hotels segments.

Capital structure is the mix of equity and debt that a company uses to maximize its returns to the stakeholders. One of the most important tasks of any management of a firm is to find the optimum capital - a balance between equity and debt - whereby the cost of capital is minimized and the profitability of the company optimized. The optimum capital mix helps in generating returns but helps to survive in a competitive industry. One can expect the growth of a company to be affected and its profitability stunted, if the optimum capital is not achieved by the company. It has been argued and proved by Miller and Modigliani (1958) that capital structure is irrelevant in a perfect market condition, characterized by the capital market with no taxes, no transaction costs and homogenous expectations. However, other studies that took into account the market imperfections have proved to the contrary that capital structure decisions can impact shareholders' wealth. However, on recognizing the existence of corporate tax, Miller and Modigliani (1963) suggested that firms should rely on as much as the debt capital to maximize the value by taking advantage of the interest tax shield. For its capital to be well structured and effectively utilized, a firm must be able to devise various ways for selecting the best components of its capital which would be used in the company's operation to raise its productivity and or achieve performance. This process should be based on the criteria well drawn up by the finance manager after making a careful financial planning and control for the company (Uremadu&Efobi, 2004).



Capital structure decision is the interaction between a company's equity capital, preference capital, debt capital and internal reserves - in order to determine what capital mix would be best suited to maximize the profitability of the company. In today's complex business world, it is essential to understand in threadbare the factors that affect the profitability and performance of the company. This study will throw light on the relationship between capital structure and profitability among 22 companies in the Hotel industry in India.

### **Objective**

There is no abundance study done on why companies opt for one option over the other in determining the capital structure, despite there being numerous research papers published on capital structure. Companies are constantly faced with the problem of deciding whether to go in for new equity or debt. The problem facing this research is how capital structure determines the profitability of companies.

The purpose of the present study is to study the capital structure and composition of companies in the hotel industry in India, whether there is a specific pattern in the capital structure of various companies in the industry and how it affects the profitability of the companies within the industry.

1. To examine the capital structure of 22 companies from 2006 to 2016.
2. To find if there is a pattern in the capital structure within the industry.
3. To find out how the capital structure would influence the profitability of companies within the industry.

### **Literature Review**

The literature shall specifically cover (1) Composition of capital structure and Choice of Capital structure and Capital structure and companies profit. Capital structure of a company comprises both long term sources such as long term debt and equity and short term sources such as cash reserves and retained earnings. 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 include debt financing and equity financing. Their model argues that the capital structure of a company ranges from share capital, retained earnings and debt financing

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.

The cost that has to be borne by the investors is the cost in terms of interest. Hence, if a firm has a good image that it can get loan at a lower cost because creditors are not worried about bankruptcy and their agency cost is very low, it can acquire more debts.

On the other hand, the pecking order theory articulated by Myers & Majluf (1984) state that firms having high profits tend to attain low debt profile because when firms are more profitable their first priority is to generate financing through retained earnings because they maximize the value of the existing shareholders. If retained earnings are not sufficient, the firms can then go for debt and if further financing is required they issue new equity. The retained earnings is preferred because it almost has no cost, but if the external resources are used for financing like issuance of new shares it may take very high costs. Abor (2005) in his research has reported a significantly positive relationship between the ratios of short term debt to total assets & profitability but a negative association between the ratio of long term debt to total assets and profitability.

Eldomiaty, Choi & Cheng (2007) identify that the company should put into consideration its profits as well as other factors in selecting its capital structure like signaling effects the choice of the capital structure of a company would have on the public perception of the firm. Mishra et al. (2009) indicated that Returns on Assets is a measure of financial performance commonly utilized and adopted by many researchers to measure the firm's financial performance. Ebaid (2009) examined the capital structure and performance of firms, basically the aim was to check the relationship between debt level and financial performance of companies listed in Egyptian stock exchange. The researcher has used Return on Assets, Return on Equity and Gross Profit Margin. As per his research there is a negative significant influence of short term debt and the Total debt on the Return on Asset. There is no relationship found between long term debt and Return on Assets. He also proposed that there is no influence of the debt on Gross Profit Margin and Return on Equity. Panigrahi A.K (2010) analyzed the changing trend in the financing patterns of Indian companies in different sectors. As per their study nature of industry to which the firm belongs, size of the firm, years of existence and location of the firm play a major role in deciding the capital structure of companies in the Indian scenario. Indian corporate is predominantly dominated by long term debt and retained earnings is the most preferred source of financing. Pratheepkanth (2011) conducted a study regarding the capital structure (level of debt) and financial performance of business organizations in Sri Lanka. As per their study there is a negative relationship between capital structure and financial performance of companies. Akinyomi & Olagunju (2013) studied the determinants on capital structure by taking a sample of twenty four companies listed on Nigerian stock exchange. The findings of the study show that leverage have negative relationship with size and tax, and positive relation with profitability and growth. Agarwal D & Pradhan P.C. (2017) examined the effect of capital structure on firm value in Indian Hospitality Industry. Their study shows that Modigliani Miller theory of irrelevance of capital structure is not applicable to Indian Hospitality Industry. The companies need to continuously reassess their capital structure to improve the firm's market performance. The authors have argued that quality of the firm, size, leverage and liquidity have a significant impact on the capital structure.

### **Methodology**

This study has used secondary data for the study. Data was collected from the financial statements comprising Profit & Loss account and Balance Sheet of 22 companies in the hotel industry in India. The data compiled by <http://www.screener.in>, a website specialized in giving comprehensive financial data and analysis of companies in India, was used. Data was collected for 2006 to 2017.

Correlation analysis was used to establish the relationship between Capital structure and profitability. Here capital structure is an independent variable and profitability is the dependent variable. The net profit is measured with the help of five ratios namely Net Profit, Return on Capital Employed, Return on Equity, Return on Total Assets and Interest Cover Ratio. Capital structure is measured with the help of Debt to Equity ratio, Debt to Total Assets ratio, Short Term Debt to total assets ratio and Long Term Debt to Total Assets ratio.

### **The Following Hypotheses Were Formulated For The Study**

- H1: There is a positive relationship between Debt to Equity and Net Profit, Return on Capital employed, Return on Equity, Return on Assets and Interest Cover.
- H2: There is a positive relationship between Debt to Total funds and Net Profit, Return on Capital employed, Return on Equity, Return on Assets and Interest Cover.
- H3: There is a positive relationship between Short term debt to Total Assets and Net Profit, Return on Capital employed, Return on Equity, Return on Assets and Interest Cover.
- H4: There is a positive relationship between Long term debt to Total Assets and Net Profit, Return on Capital employed, Return on Equity, Return on Assets and Interest Cover.

**Analysis of Results:** Descriptive analysis is used in the study to interpret the data collected in the study.

**Table 1: Showing Descriptive Statistics of the Data**

Variables	Mean	Median	Standard Deviation	Range	Minimum	Maximum
Debt to Equity Ratio	1.740	1.260	3.660	67.667	(24.020)	43.647
Net Profit	44.074	11.765	106.592	1052.490	(272.590)	779.900
Return on Capital Employed	0.151	0.135	0.129	1.039	(0.202)	0.837
Return on Equity	0.221	0.215	0.188	2.132	(1.102)	1.030
Return On Assets	0.101	0.092	0.077	0.609	(0.155)	0.454
Interest Coverage	42.160	2.746	248.011	3476.154	(4.654)	3471.500
Debt to Total Assets	0.542	0.581	0.207	0.930	0.114	1.043
Short term Debt to Total Assets	0.277	0.234	0.160	0.775	0.050	0.825
Long term Debt to Total Assets	0.265	0.252	0.214	0.826	0.000	0.826

The descriptive statistics in Table 1 show the profitability indicators like Net Profit, Return on Capital employed, Return on Equity, Return on Assets and Interest Cover ratio show an average of 44.08, 0.151, 0.221, 0.101 and 42,160 respectively. The total debt to assets show an average of 0.542 or 54.2%. This means that 54% of the assets are financed by debts. The debt to equity ratio shows 1.74, which is healthy. Ratio up to 2 is considered to be acceptable.

**Table 2: Table Representing Correlation Analysis**

Variables	Net Profit	Return on Capital Employed	Return on Equity	Return on Assets	Interest Cover
Debt to Equity Ratio	0.130	(0.062)	(0.160)	(0.184)	(0.031)
Debt to Total Assets Ratio	0.125	(0.212)	0.097	(0.527)	(0.099)
Short Term Debt to Total Assets	0.067	0.421	0.256	(0.060)	0.130
Long Term Debt to Total Assets	0.071	(0.521)	(0.098)	(0.466)	(0.193)

The above results in Table 2 show the relationship between various variables used in the study. We see positive correlation between certain variables and negative correlation between certain other variables. Variables like debt to equity, debt to total assets, short term debt to total assets and long term debt to total assets have a positive correlation with net profit. Whereas, these variables largely have a slight negative correlation with Return on capital employed, Return on Equity, Return on assets and interest cover. It is to be noted that the negative correlation is not significant.

It is to be noted that unlike many other industries, the hotel industry generates a lot of immediate cash from sales. The sales on credit happen only to corporate customers. Whereas, their purchases and engagement of services are on credit basis. Hence, the industry largely funds its own working capital and does not depend much on borrowings to finance the working capital. As a result, we see a lower debt to equity ratio and positive correlation with net profits.

### Discussion and Conclusion

This study has considered the financial data of the hotel industry in India from 2006 to 2017. It was observed from the data collected of 22 companies, 6 companies had debt equity ratio of less than one. Six companies had debt equity ratio of more than two and 10 companies had debt equity ratio between 1 and 2. It can be seen that the companies are not in heavy debt but are balanced. It was observed

that the debt component in the total assets was more than 50% in the case of 14 companies. This means the companies had more debt and less equity in their capital structure. It was the reverse in the case of the remaining 8 companies who had a higher component of equity.

The study shows an average debt equity ratio of 1.74 among the entities under study. This means the debt of the companies is 1.74 times the equity employed. This is a healthy ratio, considering ratio up to 2 is considered safe. However, there is a big swing between the minimum and maximum values. If we examine closely, we will find that some companies have a very low debt to equity ratio whereas in some companies this ratio is very high.

The study shows the debt to total assets ratio of 0.54, indicating that 54% of the total assets are financed by debt. This is a good ratio, which indicates a good balance between debt and equity. If we further analyze this ratio, we will find that 27.7% of the total assets is funded by short term debt and 26.5% by long term debt. As indicated earlier, the hotel industry generates a lot of cash and pays for its purchases / services on credit. Hence, the element of short term debt is relatively low. The correlation values were found to be positive between the independent variables and the net profit. The correlation between debt to equity, debt to total assets, short term debt to total assets and long term debt to total assets and Net profits was found to be 0.130, 0.125, 0.067 and 0.071 respectively.

However, debt to equity ratio has negative correlation with ROCE at -0.062, with ROE at -0.160, with ROA at -0.184 and with interest cover at -0.31. Debt to total assets ratio has a negative correlation with ROCE at -0.212, positive correlation with ROE at 0.097, negative correlation with ROA at -0.527 and negative correlation with interest cover ratio at -0.099. Short term debt to total assets ratio has a negative correlation with ROA at -0.060 but positive correlation with ROCE, ROE and interest cover at 0.421, 0.256 and 0.130 respectively. Long term debt to total assets ratio has negative correlation with ROCE at -0.521, ROE at -0.98, ROA at -0.466 and interest cover at -0.193.

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

1. Abor, J. (2005). The Effect of Capital Structure on Profitability: An Empirical Analysis of Listed Firms in Ghana. *Journal of Risk finance*, 6(5), 28-37.
2. Agarwal.D& Pradhan P.C (2017). Impact of Capital Structure on Firm Value: Evidence from Indian Hospitality Industry, *Theoretical Economics Letters*, 7, 982-1000
3. Akinyomi, O. & Olagunju, A. (2013), Determinants of Capital Structure in Nigeria”, *International Journal of Innovation and Applied Studies*, 3(4), 999-1005.
4. Abdul R. BushraZ& Mustafa (2007) Capital Structure and Profitability: Case of Islamabad Stock Exchange. *International Review of Business Research Papers* 3 (5), 347-361
5. Ebaid, E. I. (2009). The impact of capital-structure choice on firm performance: Empirical evidence from Egypt. *The Journal of Risk Finance*, 10(5), 477-487.
6. Eldomiaty T. Choi C & Cheng, P. (2007). Determinants of Financial Signaling Theory and Systematic Risk Classes in Egypt: Implications for Revenue Management. *International Journal of Revenue Management*, 154-176.
7. Mishra, A. Wilson, C.& Williams, R. (2009). Factors affecting financial performance of new and beginning farmers. *Agricultural Finance Review*, 69(2), 160-179.
8. Modigliani .F& Miller H M (1958). The Cost of Capital, Corporation finance and the theory of Investment. *The American Economic Review*, 48(3), 261-297.
9. Modigliani F& Miller H M (1963) Corporate Income Taxes and the Cost of Capital, *The American Economic Review*, 53(3), 433-443.



10. Panigrahi A K(2010). Capital Structure of Indian Corporate Changing Trends, Asian Journal of Management Research, 2, 283-297.
11. Pratheepkanth, P. (2011). Capital Structure and Financial Performance: Evidence from Selected Business Companies in Colombo Stock Exchange Sri Lanka. Journal of Arts, Science & Commerce,2, 172-183.
12. Myers Stewart C. (1984). Capital Structure Puzzle. Journal of Finance, 39( 3),575-592.
13. Stewart C.Meyers& Nicholas MS. (1984). Corporate financing and investment decisions when firms have information that investors do not have. Journal of Financial Economics, 13 187-221.
14. UremanduS&Efobi R.U. (2004).The Impact of Capital Structure and Liquidity on Corporate Returns in Nigeria: Evidence from Manufacturing Firms. International Journal of Academic Research in Accounting, Finance and Management Sciences,2(3),1-16.