# A STUDY ON THE DETERMINANTS OF CAPITAL STRUCTURE AMONG SELECTED AUTOMOBILE INDUSTRIES

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#### **ABSTRACT**

According to financial experts and authorities, the mix of funds in the capital structure varies, but the financial structure remains the same, therefore the capital structure represents both long-term and short-term money sources. India's automobile industry is the world's third largest, and the country is currently the world's seventh largest commercial vehicle maker. One of the key engines of the country's economic growth is the automobile industry. Companies in the survey were chosen based on their popularity in India. The goal of this study is to figure out how the automobile industry works, with an emphasis on capital structure, profitability, and corporate performance. This study relied solely on secondary data from the annual reports of the top five firms. The data were investigated using correlation analysis. According to the research, the Debt Equity Ratio had no substantial impact on Ashok Leyland and Eicher Motors' performance in terms of Return on Assets, Return on Equity, Net Income Growth Rate, and liquidity condition. In force motors, position is influenced.

Key words - Automobile Industries, Capital structure, Profitability

#### INTRODUCTION

The Indian government intends to turn the country into a global manufacturing and research and development (R&D) hub. It has set up National Automotive Testing and R&D Infrastructure Project (NATRiP) facilities as well as a National Automotive Board to act as a link between the government and the industry. By 2022, the Indian government has set a lofty target of selling only electric cars in the country. Because the CNG distribution network in India is predicted to grow to 250 cities in 2018 from 125 cities in 2014, alternative fuel has the potential to meet the country's energy needs in the auto sector. In addition, the luxury car market is predicted to increase rapidly, with 150,000 units sold by 2020. In 2000, the federal government issued "India 2000" laws to reduce vehicular pollution in compliance with international standards, and later revised recommendations known as Bharat Stage emission limits. These laws have been phased in and are akin to the rigorous European pollution



regulations. Bharat Stage IV (BS-IV), the most stringent version, was first implemented in 13 cities in April 2010—Delhi (NCR), Mumbai, Kolkata, Chennai, Bangalore, Hyderabad, Ahmedabad, Pune, Surat, Kanpur, Lucknow, Solapur, and Agra—and subsequently throughout the rest of the country in April 2017.

#### **REVIEW OF LITERATURE**

Mumtaz Raheel (2013) explained in this research that firm's capital structure an important role in determining its future growth, sustainability and financial performance. It is observed that investors are highly interested in the performance of firms listed in the stock market. Empirical evidence gives little indication of identifying the casual relationship between capital structure of a firm and its financial performance.

**Oguna** (2014), the level of debt used by the firm has an effect on its financial regardless of whether it is short or long term. However, long-term sources of debt negatively and significantly affect the return on equality due to conditions associated with long term debt. This therefore means the usage of long-term debt needs to be restricted as it may come with some conditions, which may not be favorable to the financial performance of involved firms.

Mr N. Suresh Babu (2016) and Prof. G V Chellam on their research study on topic Capital Structure and Its Determinants of the Automobile Companies in India: An Empirical Analysis. Profitability is negatively associated with the leverage, and is consistent with the predictions of peckingorder theory. It shows a negative relationship between profitability and leverage.

**Mr.** Nassar S (2016) in his research study pointed that there exists a negative relationship between capital structure and financial firm performance. In his study the Return on Equity, Earnings per Share and Return on Assets as the performance indicators are negatively influenced by the debt equity ratio.

Mallikarjunappa and Carmeltia Goveas (2007) found that debt service capacity, and liquidity had inverse relationship with the debt-equity ratio, while non-debt tax shields and Business risk had direct relationship with the debt-equity ratio.

#### STATEMENT OF THE PROBLEM

Every business and industrial unit's financial pattern, or capital structure, has an impact on its value, profitability, and growth. Even though the earning capability of two or more equivalent units is the same, the profit on net worth may be different due to variances in the firm's financial patterns. In reality, capital structure has an impact on cost of capital, which has an impact on the firm's profitability, investment decisions, value, operational efficiency, operating income, earnings accessible to shareholders, and so on.

#### **OBJECTIVES OF THE STUDY**

• To analyse the impact of Degree of Financial Leverage on Return on Equity of the selected companies.

#### METHODOLOGY OF THE STUDY

#### **Sources of Data:**

For the study purpose, only secondary data is used which is sourced from the annual reports of the top five companies and websites.

#### **Research Instrument:**

The data has been analysed using statistical tool is correlation analysis.

#### ANALYSIS AND DISCUSSION

Aim: To correlate the impact of Degree of Financial Leverage on Return on Equity of the selected companies.

**H0:** There is no significant relationship between companies Degree of Financial Leverage and Return on Equity of selected companies.

**H1:** There is significant relationship between companies Degree of Financial Leverage and Return on Equity of selected companies.

Table:1 Pearson Correlation between DFL and ROE Ashok Leyland

Finan	cial Indicators	DFL	ROE
DFL	Pearson Correlation	1	-0.402
	Sig. (2-tailed)		0.503
	N	5	5
ROE	Pearson Correlation	-0.402	1
	Sig. (2-tailed)	0.503	
	N	5	5



The correlation co-efficient is -0.402, is a negative correlation. This implies that degree of financial leverage is not correlated with return on equity. The statistical significance of this correlation is tested using a t-test. Null hypothesis Ho: r=0, the correlation is not significant. The significance value of this test is 0.503> 0.05, hence accept the null hypothesis at 5% level of significance.ie, the correlation is not statistically significant.

Table:2 Correlation Between DFL and ROE in Eicher Motors

Financial Indicators		DFL	ROE
DFL	Pearson Correlation	1	.013
	Sig. (2-tailed)		.984
	N	5	5
ROE	Pearson Correlation	.013	1
	Sig. (2-tailed)	.984	
	N	5	5

The correlation co-efficient is 0.013, is a positive correlation. This implies that degree of financial leverage is not correlated with return on equity. The statistical significance of this correlation is tested using a t-test. Null hypothesis  $H_{o:}$  r=0, the correlation is not significant. The significance value of this test is 0.984 > 0.05, hence accept the null hypothesis at 5% level of significance.ie, the correlation is not statistically significant.

Table:3 Correlation between DFL and ROE in Force motors

		DFL	ROE
DFL	Pearson	1	415
	Correlation		
	Sig. (2-tailed)		.487
	N	5	5
ROE	Pearson	415	1
	Correlation		
	Sig. (2-tailed)	.487	
	N	5	5



The correlation co-efficient is -.415, is a negative correlation. This implies that degree of financial leverage is not correlated with return on equity. The statistical significance of this correlation is tested using a t-test. Null hypothesis  $H_{o:}$  r=0, the correlation is not significant. The significance value of this test is 0.487 > 0.05, hence accept the null hypothesis at 5% level of significance.ie, the correlation is not statistically significant.

Table:4 Correlation Between DFL and ROE in SML Isuzu motors

Financial Indicators		DFL	ROE
DFL	Pearson	1	515
	Correlation		
	Sig. (2-tailed)		.375
	N	5	5
ROE	Pearson	515	1
	Correlation		
	Sig. (2-tailed)	.375	
	N	5	5

The correlation co-efficient is -.515, is a negative correlation. This implies that degree of financial leverage is not correlated with return on equity. The statistical significance of this correlation is tested using a t-test. Null hypothesis Ho: r=0, the correlation is not significant. The significance value of this test is 0.375 > 0.05, hence accept the null hypothesis at 5% level of significance.ie, the correlation is not statistically significant.

Table: 5 Correlation Between DFL and ROE IN TVS Motors

Financial Indicators		DFL	ROE
DFL	Pearson	1	.731
	Correlation		
	Sig. (2-tailed)		.161
	N	5	5
ROE	Pearson	.731	1
	Correlation		
	Sig. (2-tailed)	.161	
	N	5	5



The correlation co-efficient is .731, is a negative correlation. This implies that degree of financial leverage is not correlated with return on equity. The statistical significance of this correlation is tested using a t-test. Null hypothesis Ho: r=0, the correlation is not significant. The significance value of this test is 0.161 > 0.05, hence accept the null hypothesis at 5% level of significance.ie, the correlation is not statistically significant.

#### **FINDINGS**

- In case of Ashok Leyland Motors Ltd, the Debt Equity Ratio does not critically influence the performance of the firm with regard to Return on Assets, Return on Equity, Growth Rate based on Net Income and the liquidity position.
- In case of Eicher Motors the Debt Equity Ratio does not have influence on the company's performance with regard to Return on Assets but influences the Return on Equity, Growth Rate based on Net Income and the liquidity position.
- In case of Force Motors Return on Assets and liquidity position is influenced by the Debt Equity Ratio but it does not influence the Return on Equity and Growth Rate based on Net Income.

#### **CONCLUSION**

The study indicates that the relying on borrowed funding, Indian automobile firms rely on the equity of its stockholders. Because maximising shareholder wealth is a fundamental goal of any firm, senior management is highly precise about the capital mix of debt and equity in the capital structure that will provide the most benefits to the company and its shareholders. The choice of capital structure is regarded as one of the most crucial in financial management. Debt is believed to be a two-edged sword, with equity serving as a cushion for the organisation. Debt as a financing technique is safe on one hand since interest expenses are fixed throughout time, but it is risky on the other hand because it must be returned even if losses occur.

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