

# Impact of Capital Structure on Firm's Profitability: A Study of Selected Listed Automobile Companies in India

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**ABSTRACT:** *The objective of this study is to investigate the impact of capital structure on firm's profitability through the selected automobile companies in India. The study is based on secondary data i.e. five years financial statements collected from PROWESS data base of CMIE. Based on correlation coefficient, study found a significant negative relationship between debt and profitability meaning that companies with higher proportion of debt tend to have low profitability.*

**KEYWORDS:** Capital Structure, Automobile Companies, Domestic Product, Exports, FDI.

**INTRODUCTION:** In financial year 2014-15, automobile exports grew by 15 per cent over the last year. The industry has attracted foreign direct investment worth 13.48 billion during the period April 2000 to June 2015.

In 1897, the first car ran on an Indian road. India automobile industry includes the manufacture of trucks, buses, two-wheelers etc. the industry can be broadly divided into the car manufacturing, two-wheeler manufacturing and heavy vehicle manufacturing units.

Capital structure plays a vital role in financial decision making process, maximizing the firm's performance and its value. The term capital structure is the mix of different securities issued by firms for raising funds. Funds used for firms' operations generated through internally as well as externally. When raising funds externally, firms choose between equity and debt. Capital structure decisions have great impact on the firm's financial performance. Exactly how firms choose the amount of debt and equity in their capital structures. Capital structure formulation is one of the

critical decisions taken by the finance manager of a company. As capital structure decision determines the overall cost of capital and finally the market value of the firm. The financial manager has to compare the merits and demerits of various sources of long term finance and then select the one which help in achieving the optimal capital mix or one that minimizes the overall cost of capital. This decision should be examined by its impact on the value of company or in achieving the main objective of financial management i.e. maximizing the shareholder's wealth. When we talk about maximizing the value or shareholder's wealth then it is optimum capital structure for a company at which weighted average cost of capital is Minimum. The optimum capital structure is obtained when the market value per share is maximum. There are some control variables which lay great impact on capital structure. These control variables are: - debt ratio, size, growth, profitability etc. Modigliani and Millar argued that capital structure decision is irrelevant under the assumptions of perfect capital market and no taxes. But when taxes are considered by mm, then this position is reverse.

#### **EQUITY CONSISTS OF THE FOLLOWING:**

Equity share capital + Preference share capital + Share premium + General reserve + Capital reserve + other reserve + Profit-loss account cr. – Accumulated losses – Fictitious assets.

#### **DEBT CONSISTS OF THE FOLLOWING:**

Debentures+ Mortgage loan Bank loan + Loan from financial institutions+ Public deposits.

#### **REVIEW OF LITERATURE:**

Hamidullah and Attaullah Shah (2011) studied the impact of ownership structure on capital structure and firm value in Pakistan. Used a sample of 80 firms listed on Karachi stock exchange during the time period from 2003 to 2009. Statistical techniques are used to determine the relationship between ownership structure, capital structure and firm value. The study concluded that negative relationship between the firm managerial ownership and leverage while negative with firm value. The study suggested that leverage is positively related with firm value and negatively related with managerial ownership.

Abbasali Pouraghajan and Esfandiar Malekian (2012) examined the impact of capital structure on financial performance of companies listed in Tehran stock exchange during 5-years period from 2006 to 2010. Use Multiple Regression Model for hypotheses testing and Pearson correlation for relationship between dependent variable and independent variable. ROA and ROE are indicators for evaluating the financial performance of a company. Firm size, asset tangibility ratio, and growth opportunities are independent variable. Result found that positive relationship between firm size, assets tangibility and growth opportunities with financial indicators of company.

Dr. Aurangzeb and Anwar Ul Haq (2012) investigated the determinants of capital structure in textile industry of Pakistan over the time period from 2004 to 2009. multiple regression technique is used to analyze the relationship between leverage and firm size, profitability and sales growth. Data is collected from balance sheet analysis published by state bank of Pakistan. The study revealed that positive relationship between firm size and profitability with leverage. There is negative relationship between sales growths with leverage.

Dr. Sukhdev Singh and Rajni Luthra (2013) examined the comparative study of trends in corporate capital structure pattern of refinery and metal industry in India during the time period from 2002-2012. Secondary data was taken from company's annual reports. The result found that firm's capital structure had a great impact on firm's financial performance. The study concluded that trend in debt and equity financing is increasing in both industries. The more use of debt financing is increasing the value of the firm and minimizing the cost of capital.

Hossein Nabiei Boroujeni and Mohammad Noroozi and Massoud Nadem (2013) studied the impact of capital structure and ownership structure on firm performance. Used a sample of 123 companies listed on Tehran stock exchange during the time period from 2001-2008. Rate of return on assets as a indicators of firm's performance. Use multiple regression model. The result found that increase in percentage of share owned by institutional shareholders have a positive effect on performance of companies and increased in debt ratio had a positive effect on firm performance.

Sakshi Khanna and Amit Srivastava and Yajulu Medury (2014) investigated the role of different theories of capital structure in decision making regarding the choice of capital for firms. the study concluded that irrelevance theory of Modigliani and miller and relevant like pecking order theory and trade off. Literature showed that pecking order theory and trade off had always dominated capital structure decisions.

**OBJECTIVE OF THE STUDY:** To find the Impacts of Capital Structure on Firm's Profitability by studying the Selected Listed Automobile Companies in India.

**RESEARCH METHODOLOGY:** This section will describe the research objectives, research procedure which will include the overall research design, the sampling procedure, the collection method, the methods of data analysis and a research framework of key variables for investigating

the relationship between capital structure and firm performance of automobile sector in India.

**DATA COLLECTION METHOD:** Sources of data collection will be secondary in nature. It includes annual report of respective companies and BSE website, Prowess database of CMIE, magazines, journals, website on corporate finance etc. are used for the period under study.

**DATA ANALYSIS METHODS:** This study has been carried out with a sample of 9 companies selected from automobile industry during the time period from 2010-2014. The data has been presented through different graphs and tables. Data has been converted in to relative measure such as ratio, percentage. We have used statistical tools and techniques like ratio, trends, simple and multiple correlations.

**Table: 1**

**Total debt of sample companies**

Company name	2013-14	2012-13	2011-12	2010-11	2009-10	Mean	SD
Ashok Leyland	1.19	1.11	0.83	0.88	0.95	0.992	0.153036
Bajaj Auto	0.01	0.01	0.02	0.06	0.46	0.112	0.195627
Eicher Motor	-	0.03	0.03	0.04	0.03	0.0325	0.005
Hero Honda	-	0.06	0.24	0.50	0.02	0.205	0.218708
Hindustan Motor	-0.44	-1.83	6.00	3.55	2.70	1.996	3.143045
Mahindra	0.22	0.22	0.27	0.23	0.37	0.262	0.063797
Maruti	0.08	0.07	0.07	0.01	0.07	0.06	0.028284
Swaraj Mazda	0.00	0.61	0.41	0.40	0.45	0.374	0.225455
Tata Motor	0.76	0.75	0.56	0.73	1.12	0.784	0.204768

Source: - Author Compilation from Annual Reports of the Companies

**Table: 2**

**Return on capital employed**

Company name	2013-14	2012-13	2011-12	2010-11	2009-10	Mean	SD
Ashok Leyland	-2.01	8.37	17.83	9.23	6.67	8.018	7.075417
Bajaj Auto	32.37	36.47	46.53	61.93	38.24	43.108	11.71583
Eicher Motor	43.93	32.84	22.34	22.42	16.17	27.54	10.94593
Hero Honda	37.16	38.71	42.86	40.93	60.45	44.022	9.43523
Hindustan Motor	14.15	691.24	-38.91	0.73	-33.43	126.756	316.3501
Mahindra	16.68	17.36	17.39	19.59	18.75	17.954	1.183651
Maruti	12.39	11.95	10.37	15.88	20.01	14.12	3.858562
Swaraj Mazda	5.35	11.83	14.58	14.34	10.50	11.32	3.752379
Tata Motor	1.08	0.97	3.84	5.14	7.75	3.756	2.863447

Source: - Author Compilation from Annual Reports of the Companies

**Table: 3**

**Return on equity**

Company name	2013-14	2012-13	2011-12	2010-11	2009-10	Mean	SD
Ashok Leyland	0.89	13.73	19.55	23.76	18.23	15.232	8.779363
Bajaj Auto	33.75	38.51	49.72	68.01	58.05	49.608	14.00496
Eicher Motor	45.30	33.92	23.01	23.06	16.51	28.36	11.34694
Hero Honda	37.66	42.31	55.43	65.21	64.41	53.004	12.59731
Hindustan Motor	7.27	181.83	-141.27	2.27	-158.01	-	21.582
Mahindra	22.39	22.88	24.08	26.46	26.72	24.506	2.001419
Maruti	13.26	12.87	10.76	16.50	21.10	14.898	4.029581
Swaraj Mazda	6.29	13.79	17.35	17.18	11.31	13.184	4.602443
Tata motor	1.74	1.57	6.33	9.06	15.15	6.77	5.656921

Source: - Author Compilation from Annual Reports of the Companies

**Table: 4**

**Correlation matrix for capital structure and profitability**

Company name	ROE and DEBT	ROE and ROCE	DEBT and ROCE
Ashok Leyland	-0.89269	0.772549	-0.83411
Bajaj Auto	0.430707	0.837401	-0.13256
Eicher Motor	-0.09836	0.999988	-0.09857
Hero Honda	0.447251	0.649753	-0.49331
Hindustan Motor	-0.80172	0.863026	-0.71843
Mahindra	0.646794	0.935104	0.356098
Maruti	-0.24677	0.998517	-0.28153
Swaraj Mazda	0.682512	0.993798	0.734846
Tata motor	0.666483	0.996241	0.600067

Debt, Return on capital employed (ROCE), Return on equity (ROE).

**ANALYSIS AND INTERPRETATION:** propositions become existing situation and  
Now the details of the test result of the the following table show the result

contextual to conclude some remedial so as to overcome the accordingly.

**Test result of propositions:**

Propositions	Pearson correlation
P1: there exit a relationship between ROE and DEBT	0.0926
P2: there exit a relationship between ROE and ROCE	0.894
P3: there exit a relationship between DEBT and ROCE	-0.096

**CONCLUSIONS & DISCUSSION:**

Industrial firm do conduct their business in highly complex and competitive business environment today. Financial problem persisted before and will always be there and if an industry has to move on, it should prepare itself to tackle such challenges. In this context it may be said that holding an optimum capital structure is one among pre-requisites of company for staying fit and maintaining profitability in this complex business. In an attempt to analyze capital structure and profitability of 9 listed automobile companies in India. Over a time period from 2009-2014, so focus should be given on the following areas to improve the existing situation in order to have positive impact on profitability of the automobile industry.

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