An Analysis of Financial Leverage Ratio of selected Automobile Business Industries in India - with reference to Descriptive statistics

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Abstract: Sometimes financials leverage is termed as trading on equity. Most of the financial experts of the financial management express and their views that the term trading on equity should be used for the financial leverage only in situations when the financial leverage is favourable. But financial leverage may be favourable or unfavourable depending upon the earnings made by the automobile industry. The present research article for this purpose the automobile industries has to use fixed interest or dividend bearing securities exceeds the explicit cost and also the automobile industries has to pay for the employment of this funds or not. In this researcher used one way ANOVA and descriptive statistics for.

Keywords: one way ANOVA test, Descriptive statistics.

I.   INTRODUCTION

Each and every business units needs adequate financial support for running their activities in easy way. It may obtain fund from various sources like as short terms sources, short term funds and long terms sources or long term funds. At the same time the business unit also face problems with regards to financing the company's assets because there should be a general rule for the purpose mixed debt and equity capital. Practically the capital structure cannot be affecting the total earnings of a firm but in most of the situation it can affect the share of equity shareholders earnings.

Significance of financial leverage

1. Planning and designing of capital structure
2. Profit planning

Limitation of financial leverage

1. Increase risk and rate of interest
2. Double edged weapon
3. Benefited to companies – regular and stability of earnings
4. Restriction from financial institution

II.   PROBLEM IDENTIFICATION

After gone through existing literature of the library and reviewed various articles, published data after by researcher selected below research problem.

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III.   OBJECTIVES OF THE STUDY

The main objective to study the Financial Performance of Selected Companies engaged in Automobile Industry of India are listed as under:

The objective of computing this ratio is to measure the ability of an organization to increase its owner's profit by using debt capital.

IV.   REVIEW OF LITERATURE

"Santanu Kr. Ghosh and Santi Gopal Maji". This paper makes an attempt to examine the efficiency of working capital management of the Indian cement companies during 1992-93to2001-2002. Forme assuring the efficiency of working capital management three index values performance index, utilization index and overall efficiency index are calculated, instead of using some common working capital management ratios. Using industry norms as target efficiency level of the individual firms, this paper also tests the speed of achieving that target level of efficiency by individual firms during the period of study. Finding of the study indicates that the Indian cement Industry as a whole did not perform remarkably well during this period.

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V.   Scope Of The Study

The scope of the study is very wide. The Selection of the company under the study is not made on the basis of any recognized system of sampling. The criteria is for the selection of 5(five) company. The time period of the study is determined of the 2006-07 to 2012-13 years on the basis of the convenience, industrial status and easy accessibility of the data.

1. Bajaj Auto Ltd
2. Hero Motor Corp Ltd
3. Mahindra & Mahindra Limited
4. Scooters India Limited
5. TVS Motor Company

VI.   Research Methodology

The study was preliminary based on the published accounts and annual report of all the selected Auto mobile industries under review. Out of which selected industries were in the public sector and private sector.

VII.   Period Of The Study

The present study was taken by the researcher for the period of nine (7) Accounting years from 2006-2007 to 2012-13. The researcher had selected the base year 2006-2007 because this year was normal for the present research of analysis and evaluation.

VIII.   Methods Of Analysis And Interpretation Of Data

In order to analyze the present research work on "An Analysis of Financial Leverage Ratio of selected Automobile Business Industries in India - with reference to Descriptive statistics" various techniques of financial management like as ratio analysis and various statistical techniques used by the researcher as under:-

A. Accounting Techniques
   1) Ratio Analysis

B. Statistical Techniques
   1) Descriptive statistics
   2) One-way Analysis of Variance Test (ANOVA)

❖ **FINANCIAL LEVERAGE RATIO**

Meaning:
This Ratio establishes a relationship between Earnings before interest and tax and Earnings before tax.

Objective:
The objective of computing this ratio is to measure the ability of an organization to increase its owner's profit by using debt capital.

Components:
EBIT=Earnings before interest and tax.
EBT= Earnings before tax.

Computation and interpretations:

This ratio is computed by dividing Earnings before interest and tax and Earnings before tax. This ratio is usually express as a pure ratio e.g. 2:1. In the form of a formula, this ratio may be express as follows:

$$\text{Financial Leverage Ratio} = \frac{\text{EBIT}}{\text{EBT}}$$

This ratio indicates the firm's ability to use fixed financial charge to magnify the effect of changes in Earnings before interest tax on the firm's earning per share. The EBIT is calculated by adding back the interest and taxes to the amount of net profit. Financial leverage ratio is neither a very high leverage nor a very low leverage represents a sound picture.

An enterprise should have neither a very high nor a very low ratio; it should have a satisfactory ratio. To judge whether the ratio is satisfactory or not, it should be compare with its own past ratio or with the ratio of similar firm in the same industry or with the industry average.

The Financial Leverage Ratio of selected companies of Automobile Industry in India is given in the Table No-1.1 as follows:

YEAR	COMPANY NAME				
	BAL	HMC	MML	SIL	TMC
2006-07	1	1	1.19	0.85	1.39
2007-08	1	1	1.29	0.82	1.32
2008-09	1.02	1	1.38	0.88	3.08
2009-10	1	1	1.28	0.8	1.99
2010-11	1	1.01	1.25	0.38	1.29
2011-12	1.01	1.01	1.43	0.22	1.18
2012-13	1	1	1.41	0.67	1.29

Table :- 1.1 Financial leverage ratio

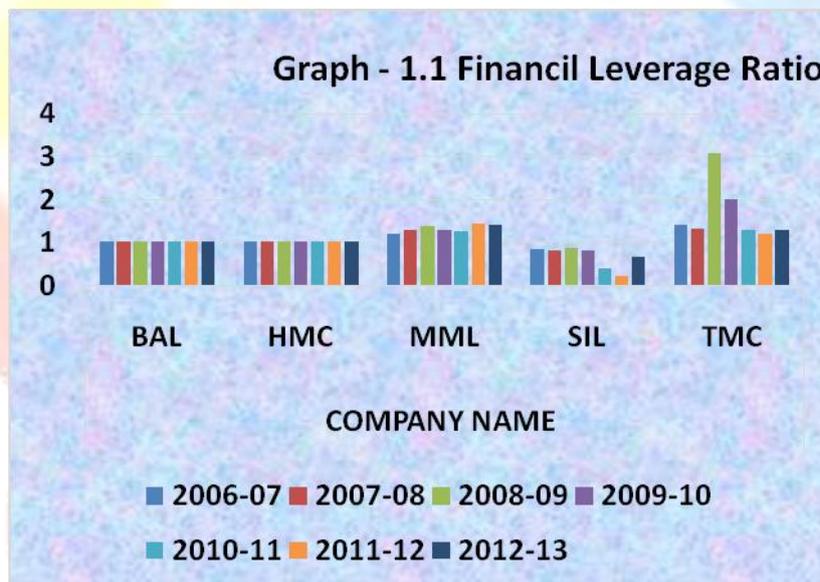The below table calculation and graph are calculated in Microsoft excel sheet for easy understanding of data analysis.

Graph - 1.1 Financial Leverage Ratio

Table – 1.2 Descriptive statistics					
	BAL	HMC	MML	SIL	TMC
Mean	1.00	1.00	1.32	0.66	1.65
Standard Error	0.00	0.00	0.03	0.10	0.26
Median	1.00	1.00	1.29	0.80	1.32
Mode	1.00	1.00	#N/A	#N/A	1.29
Standard Deviation	0.01	0.00	0.09	0.26	0.69
Sample Variance	0.00	0.00	0.01	0.07	0.47
Kurtosis	2.36	-0.84	-1.50	-0.37	3.72
Skewness	1.76	1.23	-0.05	-1.11	1.98
Range	0.02	0.01	0.24	0.66	1.90
Minimum	1.00	1.00	1.19	0.22	1.18
Maximum	1.02	1.01	1.43	0.88	3.08
Sum	7.03	7.02	9.23	4.62	11.54

Count	7.00	7.00	7.00	7.00	7.00
Largest(1)	1.02	1.01	1.43	0.88	3.08
Smallest(1)	1.00	1.00	1.19	0.22	1.18
Confidence Level(95.0%)	0.01	0.00	0.08	0.24	0.63

❖ **ANOVA TEST OF FINANCIAL LEVERAGE RATIO**

- ✓ **Ho: Null Hypothesis:** There is no any significant difference in Financial Leverage Ratio of automobile industry under study.
- ✓ **H1: Alternative Hypothesis:** There is significant difference in Financial Leverage Ratio of automobile industry under study.
- ✓ **Level of Significance:** 5%

Table – 1.3 ANOVA: Single Factor SUMMARY				
Groups	Count	Sum	Average	Variance
BAL	7	7.03	1.0043	0.0001
HMC	7	7.02	1.0029	0.0000
MML	7	9.23	1.3186	0.0080
SIL	7	4.62	0.6600	0.0670
TMC	7	11.54	1.6486	0.4695

Table – 1.4 ANOVA test Results					
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	3.901068571	4	0.9753	8.9543	0.0001	2.6896
Within Groups	3.267485714	30	0.1089			
Total	7.168554286	34				

- ✓ Degree of freedom = 35 - 1= 34
- ✓ Table Value of 'F' = 2.6896
- ✓ Calculate Value of 'F' = 8.9543

F calculate 8.9543   >   F table 2.6896

Table No- 1.4 indicates the calculate value of 'F' is 8.9543 and the table value of 'F' at 5% levels of significance is 2.6896. So, the calculate value 'F' which is more than the table value. It indicates that the Null Hypothesis is rejected and Alternate Hypothesis is accepted. So, it indicates that there is significant difference in Financial Leverage Ratio of selected automobile industry under the present research article.

IX.   LIMITATION OF STUDY

The main limitation of the study as under:

- ➢ A Study is undertaken by individual researcher therefore all the limitation of the individual researcher exists here also.
- ➢ It is secondary data based study, so the limitations of the secondary data reveals with this study.

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