

An Empirical Study of Liquidity Analysis of Selected Automobile Companies of India

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ABSTRACT

India Automobile Industry includes the manufacture of trucks, buses, passenger cars, defense vehicles, two-wheelers, etc. The industry can be broadly divided into the Car manufacturing, two-wheeler manufacturing and heavy vehicle manufacturing units. The study has focused on analysis and interpretation with respect to growth of Automobile industry. For the present study researcher has focused on liquidity of selected car and heavy motors manufacturing companies on the base of simple random sampling techniques.

Key Words: Liquidity Analysis; Automobile Industry

INTRODUCTION

The automobile industry plays a significant role as it has employed 9 million people and includes approximately 5% of world's total employment in manufacturing unit. Production of world's automobile industry has spread across three major regions that include North America, Europe and Asia. World's automobile Industry has undergone major restructuring and India has become a leading player along with nations like China, South Korea, beside the giant Japan.

OBJECTIVE OF THE STUDY

Present article is based on the Study of Liquidity of Selected Companies of Automobile Industry

PERIOD OF STUDY

The study period is to be converted 10 years; from 2007-08 to 2016-17.

NO. OF SAMPLE

Researcher has selected 5 automobile companies who is engaged in LMV and HMV for the present study.

TOOLS & TECHNIQUES

For the present study Ratio Analysis as an accounting tools and F-Test - TWO WAY ANOVA is used as tools of Statistics.

[A] CURRENT RATIO

Current ratio indicates the liquidity of current assets or the ability of the business to meet its maturing current liabilities. High current ratio finds favor with short-term creditors whereas low ratio causes concern to them. An increase in the current ratio reflects improvement in the liquidity position of the business while the decrease signals that there has been deterioration in the liquidity position of the business.

TABLE 1
CURRENT RATIO OF SELECTED AUTOMOBILE COMPANIES OF INDIA FOR THE PERIOD FROM 2007-08 TO 2016-17

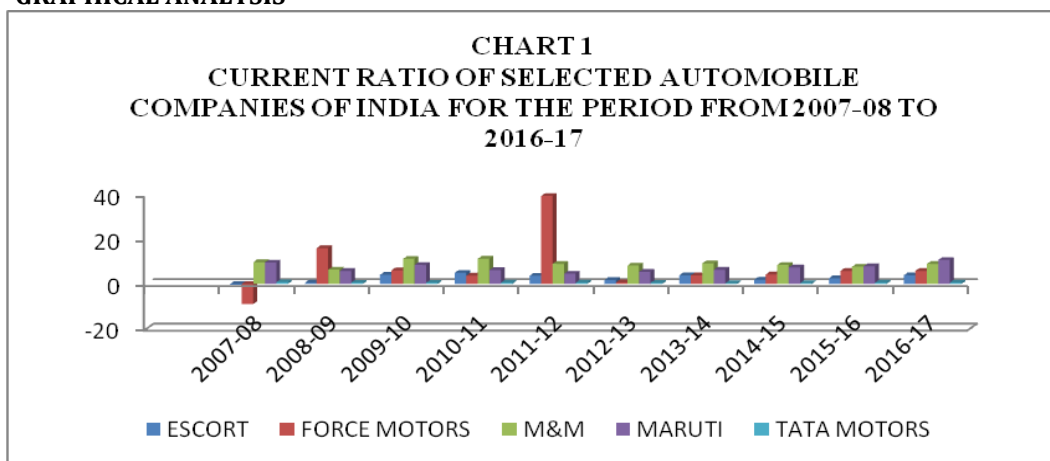
YEAR	COMPANY					TOTAL	AVG
	ESCORT	FORCE MOTORS	M&M	MARUTI	TATA MOTORS		
2007-08	-0.30	-8.98	9.75	9.58	0.80	10.85	2.17
2008-09	0.58	16.08	6.42	5.87	0.54	29.49	5.90
2009-10	4.11	6.11	11.27	8.51	0.52	30.52	6.10
2010-11	4.97	3.74	11.34	6.24	0.58	26.87	5.37
2011-12	3.70	39.53	9.03	4.59	0.62	57.47	11.49

2012-13	1.78	0.72	8.29	5.48	0.48	16.75	3.35
2013-14	3.89	3.84	9.27	6.36	0.36	23.72	4.74
2014-15	1.87	4.28	8.52	7.42	0.42	22.51	4.50
2015-16	2.57	5.86	7.74	7.91	0.60	24.68	4.94
2016-17	3.91	5.86	9.03	10.78	0.58	30.16	6.03
TOTAL	27.08	77.04	90.66	72.74	5.50		
AVG	2.71	7.70	9.07	7.27	0.55		

Source: www.Moneycontrol.com

It is evident from the above table that highest Average Current Ratio achieved in the year 2011-12 due to Average Current Ratio of Force Motors showing 11.49 in that year comparing to remaining research unit while higher average Current Ratio 7.27 is showing by Force Motor during research period M & M followed with average 9.07 percentage during research period.

➤ **GRAPHICAL ANALYSIS**



It is evident from the above chart that highest average EPS achieved in the year 2011-12 due to average Current Ratio of Force Motors comparing to remaining research unit as well as higher average Current Ratio of force motors showing during research period.

➤ **STATISTICAL ANALYSIS**

Table 2					
"F"-Test Two Way ANOVA for Current Ratio of selected Automobile Companies of India for the period from 2007-08 to 2016-17					
H ₀ : There is No Significant Different between Current Ratio of Selected Automobiles Companies of India for the period from 2007-08 to 2016-17					
H ₁ : There is Significant Different between Current Ratio of Selected Automobiles Companies of India for the period from 2007-08 to 2016-17					
Source of Variation	Sum of Square	Degree of Freedom	Mean Sum of Square	F _c	F _t
R.S.S.	271.6576	9	30.18417	0.855281	2.152607
C.S.S.	530.1097	4	132.5274		
W.S.S.	1270.495	36	35.29153		
T.S.S.	2072.262	49			

From the "F" test two way ANOVA Table as calculated above it shows on the base of the year wise that Calculated value of F_c = 0.855281 while tabular value of F_t = 2.152607 which show that calculated value F_c is smaller than tabular value F_t, F_c < F_t Hence Null Hypothesis is accepted and Alternative Hypothesis is rejected that there is no significant Difference for selected automobile industry on the base of year while on the base of research unit during research period Calculated value of F_c = 3.75522 while tabular value of F_t =

2.633532 which show that calculated value F_c is greater than tabular value F_t , $F_c > F_t$ Hence Null Hypothesis is rejected and Alternative Hypothesis is accepted that there is significant Difference for selected automobile companies of India during research period for Current Ratio.

[B] QUICK RATIO

Quick ratio is also known as liquid ratio or acid test ratio. Current ratio provides a rough idea of the liquidity of a firm so subsequently a second testing device was developed named as acid test ratio or quick ratio. It establishes relationship between liquid assets and current liabilities. In many businesses a significant proportion of current assets may comprise of inventory. Inventory, by nature, cannot be converted into ready cash abruptly. The term liquid assets does not include inventory.

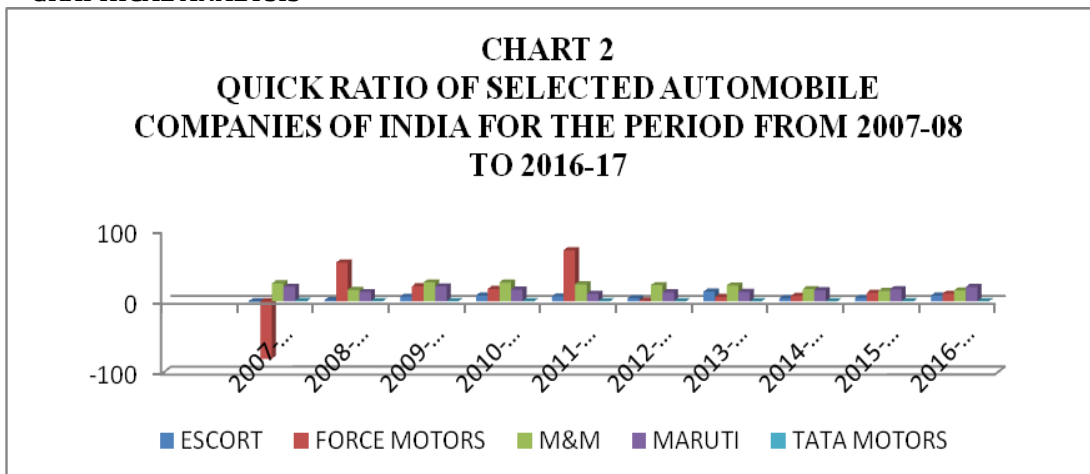
TABLE 3
QUICK RATIO OF SELECTED AUTOMOBILE COMPANIES OF INDIA FOR THE PERIOD FROM 2007-08 TO 2016-17

YEAR	COMPANY					TOTAL	AVG
	ESCORT	FORCE MOTORS	M&M	MARUTI	TATA MOTORS		
2007-08	-0.99	-81.25	25.43	20.56	0.61	-35.64	-7.13
2008-09	1.61	54.74	16.07	13.04	0.42	85.88	17.18
2009-10	6.55	21.32	26.72	21.10	0.39	76.08	15.22
2010-11	8.21	17.53	26.46	16.50	0.37	69.07	13.81
2011-12	6.88	72.10	24.08	10.76	0.41	114.23	22.85
2012-13	4.43	1.23	22.88	12.87	0.27	41.68	8.34
2013-14	13.64	6.33	22.39	13.26	0.15	55.77	11.15
2014-15	4.24	7.69	17.25	15.65	0.19	45.02	9.00
2015-16	4.86	12.11	14.59	16.92	0.33	48.81	9.76
2016-17	8.05	10.80	15.40	20.28	0.33	54.86	10.97
TOTAL	57.48	122.60	211.27	160.94	3.47		
AVG	5.75	12.26	21.13	16.09	0.35		

Source: www.Moneycontrol.com

It is evident from the above table that highest Average Quick Ratio achieved in the year 2011-12 due to Average Quick Ratio of Force Motors showing 22.85 in that year comparing to remaining research unit while higher average Quick Ratio 16.09 is showing by Maruti Udyog during research period M & M followed with average 21.13 percentage during research period.

➤ **GRAPHICAL ANALYSIS**



It is evident from the above chart that highest average Quick Ratio achieved in the year 2011-12 due to average Quick Ratio of Force Motors comparing to remaining research unit as well as higher average Quick Ratio of force motors showing during research period.

➤ STATISTICAL ANALYSIS

Table 3					
"F"-Test Two Way ANOVA for Quick Ratio of selected Automobile Companies of India for the period from 2007-08 to 2016-17					
H₀: There is No Significant Different between Quick Ratio of Selected Automobiles Companies of India for the period from 2007-08 to 2016-17					
H₁: There is Significant Different between Quick Ratio of Selected Automobiles Companies of India for the period from 2007-08 to 2016-17					
Source of Variation	Sum of Square	Degree of Freedom	Mean Sum of Square	F_c	F_t
R.S.S.	2726.468	9	302.9409	0.896619	2.152607
C.S.S.	2710.961	4	677.7403	2.005919	2.633532
W.S.S.	12163.33	36	337.8703		
T.S.S.	17600.76	49			

From the "F" test two way ANOVA Table as calculated above it shows on the base of the year wise that Calculated value of $F_c = 0.896619$ while tabular value of $F_t = 2.152607$ which show that calculated value F_c is smaller than tabular value F_t , $F_c < F_t$ Hence Null Hypothesis is accepted and Alternative Hypothesis is rejected that there is no significant Difference for selected automobile industry on the base of year while on the base of research unit during research period Calculated value of $F_c = 2.006919$ while tabular value of $F_t = 2.633532$ which show that calculated value F_c is also smaller than tabular value F_t , $F_c < F_t$ Hence Null Hypothesis is accepted and Alternative Hypothesis is rejected that there is no significant Difference for selected automobile companies of India during research period for quick Ratio.

CONCLUSION

From the above analysis it shows that year base current ratio as well as year base and unit base quick ratio is showing equality norms for the selected research unit of automobile industry during research period while unit base current ratio is showing unequal norms during research period.

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A leader has the vision and conviction that a dream can be achieved. He inspires the power and energy to get it done.

~ Ralph Nader