Shabd Braham E ISSN 2320 – 0871
International Research Journal of Indian languages 17 January 2018
Peer Reviewed Refereed Research Journal

Liquidity Analysis of Listed Two Wheeler Manufacturers Firms India

Rekha Melwani (Asst. Professor)
Shri Vaishnav Institute of management
CS Dr. Manish Sitlani
Head, School of law
Devi Ahilya University
Indore, Madhya Pradesh, India

Abstract

A trade -off between Profitability and liquidity of the firms is a crucial aspect of financial health of any organization. These are two important variables which affect the overall profitability and future financial health of the organization. Liquidity is used to describe the ease with which an asset can be converted into cash. Liquidity is a measure of the ability of a firm to pay its liabilities when they are due. As the ultimate goal of a firm is to gain profit and maximize the wealth; indicators of profitability, even though the liquidity management is important because if a firm could not even fulfill its short term obligation and survive, generating profit and maximizing its shareholders wealth are out of question. The present study is an attempt to analyze the liquidity position of two/three wheeler manufacture firms listed at BSE, India and also the impact of liquidity on profitability of the considered firms. The liquidity has measured through current ratio and liquid ratio and profitability has measured through net profit ratio. The technique of correlation and regression analysis has applied and results indicated that there was negative impact of liquidity on profitability of the considered firms.

Key words : *Liquidity, Profitability, Current assets, Liquid Assets*

Introduction

Profitability and liquidity are two variables which have important role in performance and sustainability of any organization. Liquidity is used to describe the ease with which an asset can be converted into cash. Liquidity is a measure of the ability of a firm to pay its liabilities when they are due. Current assets of the firm are associated with liquidity because they can easily be converted into cash. Current assets are vital for the survival of any business because they provide funds for settlement of the firm's current obligations. Many business failures are traced to their failure to pay their debts; though Companies may be generating profits and have a long-term financial strength (Price et al., 2003). For this reason the management of liquidity is an important factor for business survival and profitability. There have been many researches on the influence of profitability and liquidity ratios towards the growth of profit. Grace Ofoegbu N et. Al. (2016) found that liquidity and profitability are closely correlated. Liquidity of the firms shows the short term solvency which indicates that if firms are short term solvent it is able to pay off is short term obligation. As the ultimate goal of a firm is to gain profit and maximize the wealth; indicators of profitability, even though the liquidity management is important because if a firm could not even fulfill its short term obligation and survive, generating profit and maximizing its shareholders wealth are out of question. Management of liquidity is more important even in the times of crisis as stated by Eljelly (2004). According to Fraser (1998) it is important to understand the nature of liquidity and how it actually affects a firm's profitability. As stated by Niresh et. al. (2012) liquidity played an important role in the successful functioning of a business firm. Liquidity analysis is of major importance to both the internal and external analysts as it has close relationship with day to day operations of a business. A weak liquidity position creates a threat to the solvency as well as profitability of a firm and makes it unsafe and unsound.

Two/three wheelers Industry (2/3 wheelers)

The two-wheeler industry in India has been in existence since 1955. It consists of three segments viz., scooters, motorcycles, and mopeds. The increase in sales volume of this industry is proof of its high growth. In 1971, sales were around 0.1 million units per annum. But by 1998, this figure had risen to 3 million units per annum. In year 2016-17 the production of two wheelers raised to 1,84,99,970 . India is the second largest two wheelers manufacturers (ACMA). Total production of two wheelers in year 2016-17 was 19929485 (SIAM). Three wheelers segment covered passenger carrier and goods carries. The total production of three wheelers in the financial year 2016-17 was 783149 vehicles.

Literature Review

Rafiq Ahmed (2016) studied the A Study of Relationship between Liquidity and Profitability of a bank through financial statement analysis. The study was conducted on Standard Bank of Pakistan. The liquidity was measured through Current ratio, Quick ratio and Working capital ratio and profitability was measured thorough Gross Profit and Net profit. The study concluded that there was positive correlation between liquidity and profitability of the bank. Grace Ofoegbu N et. al. (2016) studied the impact of liquidity ratios on the profitability of pharmaceutical companies listed at Nigeria stock exchange for the period of 2000-2011. Secondary data was used for the study. In the study, liquidity of the firm was measured through liquidity ratio, the debt ratio, the receivable ratio, and the sales growth ratio and profitability was measured through Return on Assets. The results of the study showed that debt ratio and the sales growth ratio have a positive but not significant impact on profitability of the firms. The receivable ratio has a negative impact on the profitability but the relationship is not significant. The study concluded that liquidity ratio and profitability of the pharmaceutical companies was significantly and positively related. Dr. K. Jothi et. al. (2016) studied the liquidity and profitability position of selected automobile companies for the period of five years from 2011-2012 to 2015-2016. The selected automobile companies were Maruti Suzuki Limited, Mahindra and Mahindra Limited, Tata Motors Limited and TVS Motors Limited. The study was analytical study and applied ratio analysis and correlation analysis. The results of the study found that in case of TVS Motors Limited there was a high level of consistency (Liquidity position) was noticed. In case of Tata Motors and TVS motors there was a high level of consistency (profitability position) was noticed. The study also found that there is a positive relationship between the profitability, Short term and Long term capital.

A study by Asian A Umobong (2015) assessed the impact of liquidity and profitability ratios on growth of profits in Pharmaceutical firms in Nigeria. Return on assets, returns on capital employed, returns on equity, gross profit ratio and net profit ratio were regressed against the dependent variable growth of profit. The results of the study indicated significant contributions of all the variables to profit growth of pharmaceutical companies in Nigeria which implied that continued improvement in the variables can lead to increases in growth of profit by the Pharmaceutical firms. The study by Ravivathani Thuraisingam (2015) analyzed the nature of the liquidity and its impact on the profitability of the firms which are listed companies in Sri Lanka. The study period was 2008-2012. The profitability was measured through Return on Equity (ROE) and Return on Assets (ROA) and liquidity was measured through Current Ratio and liquid ratio. The study applied correlation and regression analysis and found that there is no significant relationship between liquidity and profitability for the study period. K. Venkatachalam et. al. (2015) studied the liquidity and profitability analysis of Bharat Heavy Electrical Limited during the period of 2007-08 to 2013-14. The study measured the liquidity by Current Ratio, Quick Ratio, Absolute cash ratio and solvency measured by Debt Equity ratio, Proprietary Ratio, Capital Gearing Ratio, Current Assets to Fixed Assets Ratio and profitability measured by Gross Profit, Net Profit, Operating profit ratio, Return on capital employed, Return on Shareholders' Investment, Return on Total Assets.

Waqas Bin Khidmat et. al. (2014) studied the impact of liquidity and solvency on profitability of chemical firms in Pakistan. Liquidity measures the short terms solvency, solvency shows the long term solvency and profitability measures the profit margin of the considered chemical firms in Pakistan. The liquidity was measured by Current ratio and quick ratio, solvency was measured through Debt Equity ratio and Debt Coverage ratio and profitability was measured thorough Return on assets sand Return on Equity. Through correlation and regression techniques it was found that liquidity ratio affected positively and solvency affected negatively on profitability. Serap Çoban (2014) investigated interaction between firm growth and profitability using panel data on Turkish listed manufacturing firms over the period 1997-2012. The study took two variables, Profit Rates and Growth Rates and applied regression analysis. The results of the study found that there was a statistically significant positive relation between current profits and current growth. The results showed that the impact of current profits on current growth is much stronger than the impact of current growth on current profits in the case of Turkish manufacturing firms. Apart from it, the results suggested that lagged profits affect current profits positively and lagged profitability is a significant determinant of current profits. Besides, the connection between current profits and lagged profits is much stronger than the connection between current growth and current profits.

Priya, K. Dr. Nimalathasan, B (2013) studied the effect of changes in liquidity levels on profitability of manufacturing companies in Sri Lanka. The liquidity management was measured through Debtor's collection period, Creditors' payment period, Inventory sales period, Operating cash flow ratio, and current ratio. The profitability was measured through Return on Assets and Return on Equity. The study was done on listed manufacturing companies in Sri Lanka over a period of past 5 years from 2008 to 2012. Data were analyzed through correlation and regression and results of the study suggested that there is a significant relationship exists between liquidity and profitability among the listed manufacturing companies in Sri Lanka.

Methodology

The present study is analytical and empirical in nature. The study made an attempt to analyze the liquidity position and also find out the impact of liquidity on profitability of two/three manufacturers firms listed at BSE, India. Secondary data has used for the analysis and collected from Annual reports of the considered two/three wheelers manufactures firms listed at BSE, India. Liquidity has measured through Current ratio (CR) and Liquid ratio (LR) and profitability has measured through availability of net profit to sales i.e. Profitability Ratio (PR). The technique of correlation and regression has applied for measuring the impact of liquidity on profitability through SPSS 21.0

Sample Selection

The sample has selected from the firms which were listed at BSE, India in the category of two/three wheeler manufacturers firms as on 31.03.2016. Initially fifteen listed firms were selected, the sample was reduced due to delisted and bicycle manufacturers firms, as these were not considered in the present study. After removing of these firms the sample reduced to seven. The study time period is taken from financial year 2006-07 to 2015-16.

Objectives of the Study

1 To analyze the liquidity position of 2/3 wheeler manufacturers firms listed at BSE, India.

2 To study the impact of liquidity on profitability of 2/3 wheeler manufacturers firms listed at BSE, India.

The first objective has achieved through conducting the analysis of current ratio and liquid ratio through tabulation and graphs. To achieve the second objective following hypotheses has been framed:

Hypothesis

Shabd Braham
E ISSN 2320 – 0871
International Research Journal of Indian languages
17 January 2018
Peer Reviewed Refereed Research Journal

H01: There is no significant impact of current ratio on profitability of two/three wheelers manufacturers firms listed at BSE, India.
H11: There is significant impact of current ratio on profitability of two/three wheelers manufacturers firms listed at BSE, India.

Measurement of Variables

Liquidity has taken as independent variable and profitability has taken as dependent variable. The measures of liquidity are Current ratio (CR) and Liquid ratio (LR). The measure of profitability is Profitability Ratio (PR)

Table No. 1: Measures of Variables

Liquidity	Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$
	Liquid Ratio = $\frac{\text{Liquid Assets}}{\text{Current Liabilities}}$
Profitability	Profitability Ratio = $\frac{\text{Net Profit X 100}}{\text{Sales}}$

Liquidity Analysis

Liquidity analysis has objective to understand the liquidity position of two/three manufacturer firms listed at BSE, India. Liquidity has measured in terms of Current Ratio and Liquid Ratio. Current ratio is measured as Current Assets to current liabilities and liquid ratio is measured as liquid assets to current liabilities.

Current Ratio

Following table shows the data of current assets and current liabilities for ten financial years for 2/3 wheeler manufacturer firms in India.

Table No.2: Current Ratio

Year	Current Assets (Rs. Crores)	Current Liabilities (Rs. Crores)	Current Ratio
2006-07	6552.23	7740.52	0.85
2007-08	4487.32	5501.73	0.82
2008-09	5118.8	5909.43	0.87
2009-10	7418.39	10667.71	0.70
2010-11	5913.21	11919.75	0.50
2011-12	8256.91	11217.09	0.74
2012-13	8429.95	10824.36	0.78
2013-14	9041.93	12212.49	0.74
2014-15	10952.22	12012.52	0.91
2015-16	10801.16	11291.17	0.96
Mean	7697.212	9929.677	0.78

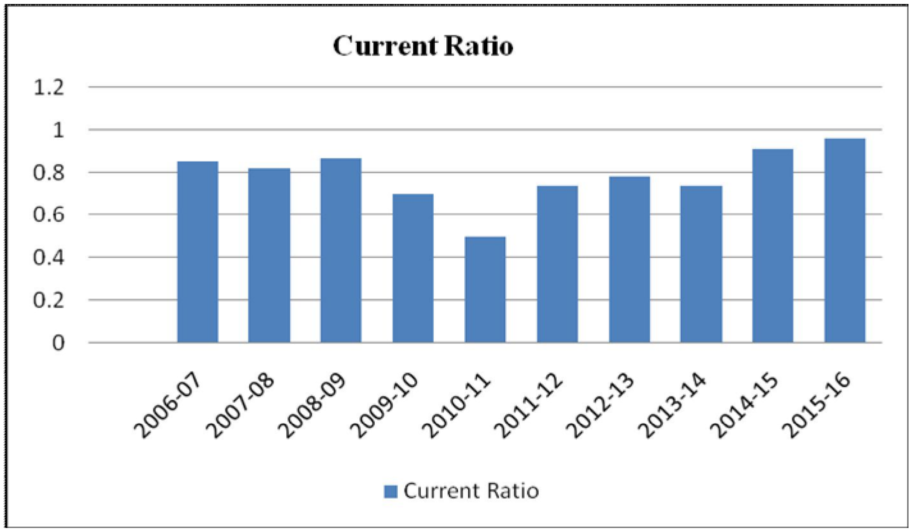

Figure No. 1: Current Ratio

The ideal position of the Current ratio depends upon the nature of Industry. Various schools of thoughts claim that, the position Current ratio as 2:1. It means that the Current Assets should be double of current liabilities. However; it can be claimed that the Current Assets must be double of the Current liabilities. In other words there must be sufficient Current Assets to meet the Current liabilities. This sufficiency depends upon the nature of the Industry.

The current ratio of 2/3 Wheelers showed a position of 0.85:1 in financial year 2006-07 at the beginning of the considered period against its mean value 0.78 and its lowest point for financial year 20010-11 at 0.54:1. Despite of the fact that ideal position of current ratio depends upon the nature of Industry, here the industry, each year, was faced lacking in terms of availability of Current Assets to pay off its Current Liabilities. Even the entire amount of Current liabilities could not be paid by the available Current Assets. It has been observed that these considered firms faced the crises of short term liquidity.

Liquid Ratio

Liquid ratio is ratio of liquid assets to current liabilities. The liquid assets are calculated by deducting the inventory from current assets. The below mentioned table no 3 shows liquid ratio for the considered firms.

Table No. 3: Liquid Ratio

Year	Liquid Assets (Rs. Crores)	Current Liabilities (Rs. Crores)	Current Ratio
2006-07	5305.65	7740.52	0.69
2007-08	3130.96	5501.73	0.57
2008-09	4061.65	5909.43	0.69
2009-10	6163.8	10667.71	0.58
2010-11	4211.96	11919.75	0.35
2011-12	6184.98	11217.09	0.55
2012-13	6495.89	10824.36	0.60
2013-14	6954.67	12212.49	0.57
2014-15	8172.57	12012.52	0.68
2015-16	8149.35	11291.17	0.72
Mean	5883.148	9929.677	0.60

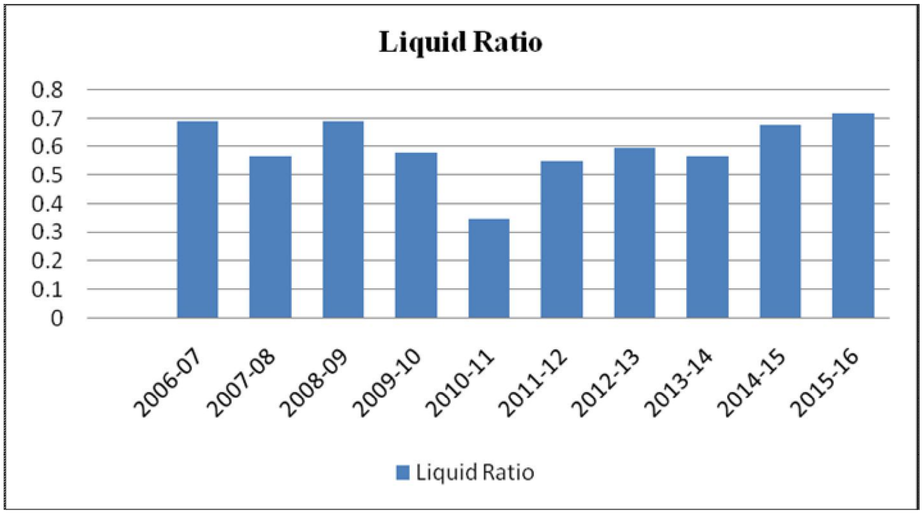

Figure No. 2: Liquid Ratio

Liquidity when measured in terms of Liquid Ratio. It has aim to measure the firms' ability to meet its Current Liabilities out of its Liquid Assets. Liquid ratio is refinement of Current ratio; Liquid ratio shows the capacity of the firm to pay the liquid liabilities from its Liquid Assets. Similar to Current ratio ideal Liquid ratio depends upon the nature of Industry. However it could be concluded that Liquid Assets must be in higher to the Liquid Liabilities, so that the liquid assets must be able to pay off its Liquid liability.

On the basis of table no. 2 , it has been observed that Liquid ratio for 2/3 wheelers segment had mean value of liquid ratio was 0.60:1 which indicated that this segment was facing the problem of liquidity. The 2/3 wheelers firms were able to payoff only 60% of its current obligations from its liquid assets even in the year 2010-11 it was lowest LR (0.35:1) less than its mean value (0.60:1).

Correlation and Regression Analysis

Table No. 4: Correlations

		PR	CR	LR
PR	Pearson Correlation	1	-.051	-.047
	Sig. (2-tailed)		.674	.701
	N	70	70	70
CR	Pearson Correlation	-.051	1	.890**
	Sig. (2-tailed)	.674		.000
	N	70	70	70
LR	Pearson Correlation	-.047	.890**	1
	Sig. (2-tailed)	.701	.000	
	N	70	70	70
**. Correlation is significant at the 0.01 level (2-tailed).				

The correlation coefficient between profitability and current ratio (r=-0.051) is weak and it shows that it is negatively correlated. As the current ratio increases it decreases the profit margin and

Shabd Braham E ISSN 2320 – 0871
International Research Journal of Indian languages 17 January 2018
Peer Reviewed Refereed Research Journal

vice versa. The correlation between profitability and liquid ratio (r=-0.047) is low and negative. The correlation between liquidity and profitability is statistically insignificant.

Regression Analysis

Table No. 5: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.051[a]	.003	-.012	.18680	.003	.179	1	68	.674	1.307
a. Predictors: (Constant), CR										
b. Dependent Variable: PR										

The Regression model shows that the value of R square is 0.003, it indicates that only 0.03 % variation is explained by liquidity.

Table No.: 6 ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.006	1	.006	.179	.674[a]
	Residual	2.373	68	.035		
	Total	2.379	69			
a. Predictors: (Constant), CR						
b. Dependent Variable: PR						

The ANOVA table shows that value of p (p=0.674) is more than 0.05 which indicates that there is insignificant impact of liquidity on profitability of 2/3 wheeler manufacturers firms in India. The results show that the null hypothesis that there is no significant impact of liquidity on profitability is accepted and alternative hypothesis has rejected.

Table No. 7: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.032	.042		.779	.439		
	CR	-.013	.030	-.051	-.423	.674	1.000	1.000
a. Dependent Variable: PR								

On the basis of above table no 7, the following relationship can be established between profitability and liquidity of two/three wheeler manufacturer firms in India listed at BSE.

PR = 0.032-0.013 CR

Conclusion

The present study is based on the analysis of trade off between liquidity and profitability of two/three wheeler manufacturer firms listed at BSE, India. The analysis showed that the considered firms faced the liquidity problem and the firms had lesser current assets in comparison with the current liabilities. The regression results indicated that there is negative insignificant impact of liquidity on profitability of the considered two/three wheeler manufacturer firms in India.

Limitations and Scope for Future Research

The present study has undertaken the listed two/three wheeler manufacturer firms in India, the results cannot be generalized. There are number of private players who entered in Indian market through FDI. The study is limited to only listed firms in India. The future research study may include other automobile companies and can include the other variables which directly or directly affect the profitability of the firm.

References

- *Asian A Umobong (2015), Assessing The Impact Of Liquidity And Profitability Ratios on Growth Of Profits In Pharmaceutical Firms In Nigeri, European Journal of Accounting, Auditing and Finance Research, Vol.3, No.10, pp.97-114, October 2015*
- *Eljelly, A. M. (2004). Liquidity - Profitability Trade-off: An Empirical Investigation In An Emerging Market. International Journal of Commerce and Management, Volume 14, issue 2, pp 48-61*
- *Grace Ofoegbu N, Ann Duru N., Vincent Onodugo (2016), Liquidity Management and Profit Performance of Pharmaceutical Manufacturing Firms Listed In Nigeria Stock Exchange International Journal of Management Sciences and Business Research, July-2016 ISSN (2226-8235) Vol-5, Issue 7*
- *K. Jothi, A. Geethalaxami (2016), Liquidity and Profitability Position of Select Automobile Companies in India, International Journal of Advance Research in Computer Science and Management Studies, Volume 4, Issue 1, January 2016, 262-268*
- *K. Venkatachalam, A. Karupaiah (2015), Liquidity and Profitability Analysis of Bharat Heavy Electrical Limited- A Case Study, Asia Pacific Journal of Research, Vol: I. Issue XXXI, September 2015, pp 45-52*
- *Price, J. E.; Haddock, M. D.; and H.R. Brock, 2003, College Accounting (Tenth Edition),*
- *Irwin; McGraw-Hill.*
- *Priya,K, Dr.Nimalathasan,B (2013), Liquidity Management and Profitability: A Case Study of Listed Manufacturing Companies in Sri Lanka, International Journal of Technological Exploration and Learning (IJTEL), Volume 2 Issue 4, pp 161-165*
- *Rafiq Ahmed (2016) studied the A Study of Relationship between Liquidity and Profitability of Standard Charterd Bank Pakistan: Analysis of Financial Statement Approach, Global Journal of Management and Business Research: C Finance, Volume 16, Issue 1 Version 1.0 Year 2016 pp-52-60*
- *Ravivathani Thuraisingam (2015), The Effects of Liquidity Management on Firm Profitability: Evidence from Sri Lankan Listed Companies, Research Journal of Finance and Accounting, Vol.6, No.5, 2015, pp 129-134*
- *Ray Sarbapriya (2012), An Insight into the Performance of Indian Automobile Industry, Science Education Development Institute, ISSN: 2276 – 6715, Vol. 2(5), pp 191-197.*
- *Serap Çoban (2014), The Interaction Between Firm Growth And Profitability: Evidence From Turkish (Listed) Manufacturing Firms, The Journal of Knowledge Economy & Knowledge Management , Volume: IX Fall Pp 73-82*
- *Waqas Bin Khidmat, Mobeen Ur Rehman (2014), Impact of Liquidity & Solvency on Profitability Chemical Sector of Pakistan, Economics Management Innovations, Volume 6, Issue 3, pp-3-13*
- *Niresh, J. A. (2012), Trade-Off Between Liquidity & Profitability: A Study of Selected Manufacturing Firms in Sri Lanka, Journal of Arts, Science & Commerce, Vol.– III, Issue–4(2), pp 34-40*