

## G ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

# AN EMPIRICAL STUDY ON LIQUIDITY ANALYSIS OF INDIAN FMCG COMPANIES

Jagruti Chaniyara<sup>1</sup> Assistant Professor, Govt. Arts & Commerce College, Okhamandal

S. J. Parmar<sup>2</sup>

Professor, Department of Commerce, Saurashtra University, Rajkot

**ABSTRACT:** Liquidity, especially gaining major concern in all over the world because of the current financial disorder and business environment in world economy. It has become a major source of concern for business managers because it is somehow directly related to profitability of business as well as owner's equity. As liquidity is important to every business, researchers have tried to analyse liquidity of FMCG (Fast Moving Consumer Goods) sector. In this paper researchers cover a period of 13 years from 2007-08 to 2019-20. For the purpose of study secondary data have been utilised by researchers. For testing of hypotheses researchers have used ratio analysis as accounting tool and ANOVA has been applied as statistical tool.

### **KEY WORDS: Liquidity and FMCG Sector**

### **INTRODUCTION**

Every stakeholder has interest in the liquidity position of the company. Liquidity plays key role in the upliftment of a company. Liquidity is the ability of a company to meet its short-term liabilities and convert its assets into cash. According to Herbert Mayo, "Liquidity is the ease with which assets may be converted into cash without loss". It refers to the firm's ability to meet the claims of suppliers of goods, services and capital. According to Shim and Siegel (2000) accounting liquidity is the company's capacity to liquidate maturing short-term debt (within one year). Maintaining adequate liquidity is much more than a corporate goal, it is a condition without which the continuity of a business is at risk. A solid liquidity base might be distinguished as the essential power of any concern for continuing its everyday activities. Moreover, the sound liquidity position empowers the concern in keeping up a good acknowledge term for its suppliers.

FMCG sector in India has been playing a very important role in building up its economy. Fast-moving consumer goods (FMCG) sector is India's fourth-largest sector with household and personal care accounting for 50% of FMCG sales in India. The industry is not just by giving a large number of buyer merchandise vital for conveying on everyday exercises of the general individual but also creating lots of jobs in India. It prompts remarkable changes in the liquidity the executive rehearses in Indian FMCG companies. With this background the present study aims to analyse the liquidity position of selected sample companies.

### **OBJECTIVES OF THE STUDY**

In the broad sense, the main objective of this research paper is to examine the liquidity position of the FMCG sector through selected sample units. The objectives are as under:

- > To analyse the liquidity position of selected companies of FMCG Sector during the study period.
- > To get knowledge about selected liquidity ratios.
- To suggest some valuable suggestion regarding liquidity position of selected sample FMCG companies of India.

### LITERATURE REVIEW

Dr. Jitendra Singh Bidawat (2020), has analysed the liquidity management of selected five FMCG companies of India. The researcher covered five years from 2014-15 to 2018-19 as study period. For the purpose of study, purely secondary data is used by researcher. The technique of mean, standard deviation, coefficient of variation, ratio analysis, and ANOVA test has been applied to analyse the data.

Unnati Y. Parmar and Dr. Shailesh N. Ransariya (2019), have published a paper title, "A Study of Indian FMCG Sector on the Basis of Liquidity Performance". In that research paper they have examined liquidity ratios for the study period from 2007-08 to 2016-17. Researchers have used secondary data for her calculations and applied one-way ANOVA test for hypothesis testing. The result indicated that in relation to Liquidity Ratios, there is significant difference between selected FMCG companies during the study period.

Y. V. Reddy and Narayan, Parab (2018) published a research paper on, "The Impact of Liquidity and Leverage on Profitability: Evidence from India." This study attempts to analyse the relationship between liquidity and profitability and investigate the impact of financial leverage and liquidity on the financial performance of select pharmaceutical companies for the period from 2006-07 to 2015-16. For the analysis of data researcher use regression analysis, Hausmann test, t-test, multiple regressions.

Hanaffie Bin MD Yusoff (2017), has done a study named "The effect of liquidity and solvency on profitability – the case of public listed consumer product companies in Malaysia." For this research study researcher has selected public listed consumer product companies in Malaysia. For this research study researcher has used statistical tool like correlation analysis to find relationship between the liquidity and the firm profitability as well as relationship between solvency and firm profitability of 116 companies in the consumer product sector. For data analysis researcher has used panel data analysis, descriptive analysis, correlation analysis, assumption of ordinary least square, diagnostic test and multiple regression analysis using E-view version at last researcher find that each profitability ratio is influenced by different factors relating to liquidity and risk but the associations are similar and can expect the growth of profitability.

Dr.A.N.Tamragundi and Purushottam N Vaidya (2016), have done a study "Liquidity – Profitability Relationship: A Study of Ten Leading FMCG Companies in India". In that research paper, researchers have analysed relationship between the liquidity and the profitability of ten leading FMCG companies in India for the period of 2005-06 to 2014-15; the tools used for analysis were Spearman's Rank correlation and t-tests. It was found that both the liquidity and the profitability of the selected FMCG companies were hovering. Again, it was also found that there was a very strong positive relationship between the liquidity and the profitability of the selected FMCG companies in India.

### **RESEARCH METHODOLOGY** Sample Size

The researcher has selected top 10 FMCG companies based on their sales listed under the BSE.

### Sources of Data

The source of data for this study was primarily from secondary sources. The annual financial reports for the selected companies were used as a source of secondary data. Moreover, secondary data which is collected from thesis, books, reports, journals, periodicals, newspaper and websites.

### **Period of the Study**

The study has been undertaken for a period of thirteen years from 2007-08 to 2019-20.

### Hypothesis for the Study

- Ho: The variance arose in the Liquidity Ratios over the years and among the various companies did not differ significantly.
- H<sub>1</sub>: The variance arose in the Liquidity Ratios over the years and among the various companies differs significantly.

#### Tools used for analysis

To analyse liquidity of the selected FMCG companies, major liquidity ratios namely current ratio and quick ratio, are used as an accounting tool. Whereas for testing of the hypothesis, Two-way ANOVA is applied by researchers. Moreover, arithmetic mean, maximum & minimum values of ratios were calculated during the study period.

### DATA ANALYSIS AND INTERPRETATION

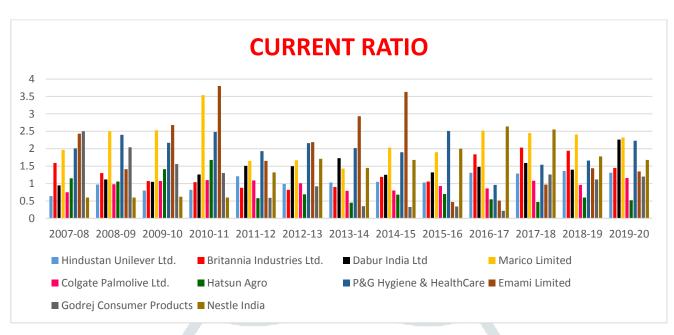
### 1. Current Ratio:

The Current ratio measures a company's ability to repay short-term liabilities such as accounts payable and current debt using short-term assets such as cash, inventory and receivables. Another way to look at it would be the value of a company's current assets that will be converted to cash over the next twelve months compared to the value of liabilities that will mature over the same period. Current Ratio of 2:1 is considered satisfactory.

N 0.	Companies Name	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12	2012 -13	2013 -14	2014 -15	2015 -16	2016 -17	2017 -18	2018 -19	2019 -20	Avg.
1	Hindustan Unilever Ltd.	0.64	0.97	0.80	0.82	1.21	0.99	1.03	1.05	1.03	1.31	1.29	1.36	1.31	1.06
2	Britannia Industries Ltd.	1.59	1.30	1.07	1.04	0.88	0.82	0.90	1.19	1.06	1.84	2.03	1.94	1.45	1.32
3	Dabur India Ltd	0.95	1.12	1.05	1.26	1.51	1.50	1.73	1.25	1.32	1.48	1.59	1.40	2.26	1.42
4	Marico Limited	1.97	2.50	2.53	3.54	1.65	1.67	1.43	2.03	1.90	2.52	2.45	2.41	2.32	2.22
5	Colgate Palmolive Ltd.	0.75	0.98	1.07	1.10	1.09	1.01	0.79	0.80	0.93	0.86	1.08	0.96	1.16	0.97
6	Hatsun Agro	1.15	1.06	1.41	1.68	0.58	0.69	0.45	0.68	0.70	0.55	0.47	0.60	0.52	0.81
7	P&G Hygiene & HealthCare	2.01	2.40	2.17	2.48	1.93	2.16	2.02	1.90	2.51	0.96	1.54	1.66	2.23	2.00
8	Emami Limited	2.43	1.41	2.68	3.80	1.65	2.19	2.93	3.63	0.47	0.51	0.97	1.44	1.35	1.96
9	Godrej Consumer Products	2.50	2.04	1.56	1.30	0.59	0.92	0.35	0.33	0.34	0.22	1.26	1.12	1.20	1.06
1 0	Nestle India	0.60	0.60	0.62	0.60	1.32	1.71	1.45	1.68	2.00	2.64	2.55	1.78	1.68	1.48
	Industry Average	1.46	1.44	1.50	1.76	1.24	1.37	1.31	1.45	1.23	1.29	1.52	1.47	1.55	1.43

(Source: Calculated from Annual Published Report of Selected Companies)

### **Chart No. 1 Trend of Current Ratio**



Above table and Chart indicate the Current Ratio for the selected sample companies from FMCG Companies of India and indicates the average trend of FMCG Industry.

Overall industry average of Current Ratio is 1.43, Average of Marico Limited, P & G Hygiene & Healthcare and Emami Limited and Nestle India are higher than industry average whereas HUL, Dabur India Ltd., Britannia Industries Ltd., Colgate Palmolive Ltd., Hatsun Agro, Godrej Consume Products and are below than industry average.

## Test of Hypotheses for Current Ratio ANOVA F Test

### **Null Hypothesis**

The variance arose in the Current Ratio over the years and among the various companies did not differ Ho: significantly

### **Alternative Hypothesis**

H1: The variance arose in the Current Ratio over the years and among the various companies differs significantly.

If the, Null Hypothesis is accepted, the Alternative Hypothesis will be rejected or vice versa.

Source of Variation	SS	df	MS	F	P-value	F crit
Between the Companies	25.33	8	3.17	9.14	4.6E-09	2.05
Between the Years	3.07	11	0.28	0.80	0.635353	1.90
Error	30.51	88	0.35			
Total	58.91	107				

Table No. 1.1 ANOVA F Test for Current Ratio

(Source: Data processed by Researcher through excel)

In above table indicates the calculated value of "F" is higher than the tabulated "F" value at 5% level of significance in between the companies. Hence, the null hypothesis stands rejected i.e. there is significant difference between the selected companies from FMCG Industry of India. And also, the difference in between the years where not significant because the calculated value of "F" is smaller than the tabulated "F" value at 5% level of significance in between the years, hence we do not reject the null hypotheses.

### 2. Quick Ratio

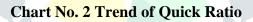
The quick ratio or acid test ratio is a liquidity ratio that measures the ability of a company to pay its current liabilities when they come due with only quick assets. Quick assets are current assets that can be converted to cash within 90 days or in the short-term. Cash, cash equivalents, short-term investments or marketable securities, and current accounts receivable are considered quick assets. Short-term investments or marketable securities include trading securities and available for sale securities that can easily be converted into cash within the next 90 days.

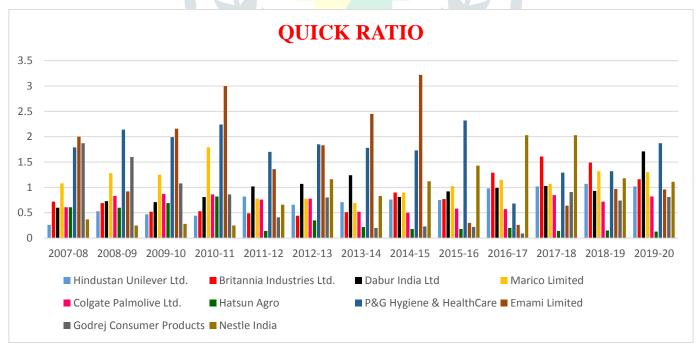
The acid test of finance shows how well a company can quickly convert its assets into cash in order to pay off its current liabilities. It also shows the level of quick assets to current liabilities. A quick ratio of 1:1 is considered good/favourable for a company.

N 0.	Companies Name	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12	2012 -13	2013 -14	2014 -15	2015 -16	2016 -17	2017 -18	2018 -19	2019 -20	Avg.
0.		00	0,7	10			10		10	10	17	10	17	-•	
1	Hindustan Unilever Ltd.	0.26	0.53	0.47	0.44	0.82	0.66	0.71	0.76	0.75	0.98	1.02	1.07	1.02	0.73
2	Britannia Industries Ltd.	0.72	0.69	0.52	0.53	0.49	0.44	0.51	0.90	0.77	1.29	1.61	1.49	1.16	0.86
3	Dabur India Ltd	0.60	0.73	0.71	0.81	1.02	1.07	1.24	0.81	0.92	0.99	1.03	0.93	1.71	0.97
4	Marico Limited	1.08	1.28	1.25	1.79	0.78	0.78	0.69	0.90	1.03	1.15	1.07	1.32	1.30	1.11
5	Colgate Palmolive Ltd.	0.61	0.83	0.87	0.86	0.76	0.78	0.52	0.50	0.58	0.57	0.85	0.72	0.82	0.72
6	Hatsun Agro	0.61	0.60	0.69	0.82	0.14	0.35	0.22	0.18	0.18	0.20	0.14	0.15	0.13	0.34
7	P&G Hygiene & HealthCare	1.79	2.14	1.99	2.24	1.70	1.85	1.78	1.73	2.32	0.68	1.29	1.32	1.87	1.75
8	Emami Limited	2.00	0.92	2.16	3.00	1.36	1.83	2.45	3.22	0.30	0.26	0.64	0.97	0.96	1.54
9	Godrej Consumer Products	1.87	1.60	1.08	0.86	0.41	0.80	0.20	0.23	0.22	0.09	0.91	0.74	0.81	0.76
1 0	Nestle India	0.37	0.25	0.28	0.25	0.66	1.16	0.83	1.12	1.43	2.03	2.03	1.18	1.11	0.98
	Average	0.99	0.96	1.00	1.16	0.81	<b>0</b> .97	0.92	1.04	0.85	0.82	1.06	0.99	1.09	0.97

### **Table No. 2 Quick Ratio**

(Source: Calculated from Annual Published Report of Selected Companies)





Overall industry average of Quick Ratio is 0.97, Average of Marico Limited, P & G Hygiene & Healthcare and Emami Limited and Nestle India are higher than industry average whereas HUL, Britannia Industries Ltd., Colgate Palmolive Ltd., Hatsun Agro, Godrej Consume Products and are below than industry average, Dabur India Ltd. are same as Industry average.

### Test of Hypotheses for Quick Ratio ANOVA F Test

### **Null Hypothesis**

Ho: The variance arose in the Quick Ratio over the years and among the various companies did not differ significantly

### Alternative Hypothesis

H1: The variance arose in the Quick Ratio over the years and among the various companies differs significantly.

If the, Null Hypothesis is accepted, the Alternative Hypothesis will be rejected or vice versa.

Source of Variation	SS	df	MS	F	P-value	F crit
Between the Companies	17.96	8	2.24	8.55	1.5E-08	2.05
Between the Years	1.57	11	0.14	0.54	0.867829	1.90
Error	23.09	88	0.26			
Total	42.61	107				

 Table No. 2.1 ANOVA F Test for Quick Ratio

(Source: Data Processed by Researcher through excel)

In above table 4.10 indicates the calculated value of "F" is higher than the tabulated "F" value at 5% level of significance in between the companies. Hence, the null hypothesis stands rejected i.e. there is significant difference between the selected companies from FMCG Industry of India. And also, the difference in between the years where not significant because the calculated value of "F" is smaller than the tabulated "F" value at 5% level of significance in between the years, hence we do not reject the null hypotheses.

### FINDINGS OF THE STUDY

### **Current Ratio:**

The current ratio represents the proportion of total current assets to total current liability. This ratio measures the company's ability to pay short-term obligations, if the ratio is 1.5 or more than one indicates sound financial condition of the company.

The overall highest ratio was the for 2010-11 at 3.8 for Emami Limited, then after ITC was the highest 3.59 in 2016-17, The ratio was the lowest in Godrej Consumer Products for 2016-17 at 0.22.

Overall average Current Ratio of FMCG Industry was 1.56 which indicates the Current Ratio of the industry. ITC, Marico Limited, P&G Hygiene & Health Care, Emami Limited, Glaxosmithkline Consumer, were the higher ratio than the average which indicates high Current Ratio of the company which also indicates good liquidity position of company where HUL, Godrej Consumer Products, Dabur India Ltd, Britannia Industries Ltd., which indicates this company was poor and precarious liquidity condition.

### **Quick Ratio:**

The Quick Ratio is including current assets, which are considered to be *quick assets*: cash and cash equivalents, short-term marketable securities, and accounts receivable The Quick ratio measures the short-term Cash liquidity of a business. The ratio is current assets divided by current liabilities; the ratio essentially implies that current liabilities can be liquidated to pay for current liabilities.

The overall highest ratio was the for 2014-15 at 3.22 for Emami Limited, then after ITC was the highest 2.44 in 2016-17, The ratio was the lowest in Godrej Consumer Products for 2016-17 at 0.09.

Overall average Quick Ratio of FMCG Industry was 0.97 which indicates the Quick Ratio of the industry.

### SUGGESTIONS

The Hindustan Unilever Ltd. (1.06), Britannia Industries Ltd. (1.32), Dabur India Ltd. (1.42), Colgate Palmolive Ltd. (0.97), Hatsun Agro (0.81), Godrej Consumer Products (1.06) and Nestle India (1.48), have to maintain at least acceptable current ratio which is 2:1. It is revealed from the analysis of the current ratio that the sample FMCG companies should have adequate current assets to settle the short term obligations as per the norm. However, the Marico ltd. has the practice of keeping excess of current assets than required.

- The sample units the Marico ltd. should avoid the over investments in the current assets and make diversion of funds for their long term benefits in the right direction.
- The acid test of finance shows how well a company can quickly convert its assets into cash in order to pay off its current liabilities. Here, Hindustan Unilever Ltd. (0.73), Britannia Industries Ltd. (0.86), Dabur India Ltd. (0.97), Colgate Palmolive Ltd. (0.72), Hatsun Agro (0.34), Godrej Consumer Products (0.76), and Nestle India (0.98) have not enough quick assets to pay off its current liabilities so, it is suggested that these companies have to re-examine its policies and work to increase its sales or implement better collection practices. and control over current obligations of sample units. These steps are helpful to companies that they are able to pay on a timelier basis.
- ➢ For P&G Hygiene & HealthCare (1.75) and Emami Limited (1.54) the quick ratio is too high it means companies are not being put its fund to work. This indicates inefficiently that cost company profits. So it is suggested that to companies, they should lower it to at least the industry average.
- > There should be proper liquidity policy for the FMCG industry.

### REFERENCES

Dr. Jitendra Singh Bidawat (2020), "Liquidity Management Analysis of FMCG Industry in India: A Comparative Study", International Journal of Scientific & Engineering Research Volume 11, Issue 6, pp 563-569.

Unnati Y. Parmar and Dr. Shailesh N. Ransariya (2019), "A Study of Indian FMCG Sector on the Basis of Liquidity Performance", International Journal of Education, Modern Management, Applied Science & Social Science (IJEMMASSS), Volume 01, No. 02, pp.46-52.

Y. V. Reddy and Narayan, Parab (2018), "The Impact of Liquidity and Leverage on Profitability: Evidence from India.", IUP Journal of Accounting Research & Audit Practices, Vol. 17Issue 1, pp.58-77.

Hanaffie Bin MD Yusoff (2017), "The effect of liquidity and solvency on profitability – the case of public listed consumer product companies in Malaysia.", Retrieved from eprints.uthm.edu.my/9865/1/Hannaffie\_Md\_Yusoff.pdf.

Dr.A.N.Tamragundi and Purushottam N Vaidya (2016), "Liquidity – Profitability Relationship: A Study of Ten Leading FMCG Companies in India". International Journal of Management (IJM) Volume 7, Issue 7, pp 363-369.

www.ibef.org