



Pharmaceutical Companies and Liquidity Analysis: A Review

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ABSTRACT

Liquidity is a vital character in the thriving performance of the business firm. A firm should make sure that it does not undergo from being short of or surplus liquidity position for the smooth running of the business operations. The predominant part in administration of working funds of a company is maintaining its liquidity, so that day-to-day operations and its obligations can be met. Hence, it is of greatest significance to maintain a steady look at liquidity position of the business as without it the company cannot survive. The current manuscript aims to study the liquidity position of the ten selected pharmaceutical companies by analyzing various liquidity ratio such as current ratio and quick ratio for the period 2004-2013. Short term creditors are mainly involved in the liquidity position of the firms to recognize the alacrity of business to oblige its current liabilities.

Keywords: Liquidity, Ratios, Pharmaceutical

JEL Classifications: G23, G33

1. INTRODUCTION

The pharmaceutical industry is dealing with developing, producing and marketing drugs or pharmaceuticals. The Pharmaceutical companies are generally dealing in generic or brand medicines and medical devices. The pharma products are subject to a variety of law regulations in all countries. Because of the multifarious compliance to be complied with as required by law and procedure, the pharmaceutical industry has become a large and very complex enterprise. From the data of previous years it is depicted that there is strong growth in Indian Pharmaceutical Industry.

As per data, in 1990 the turnover was around (US\$) 1000 million and in the year 2015 the turnover became around US\$ 30,000 million. In the year 2015 the export output was around US \$ 15,000 million. Thus as per volume of output, India is on 3rd rank worldwide and as per value it stands at 14th rank. Thereby accounting for around 10% of world's production by volume and 1.5% by value (Tax Management India. Com, By: Mr. M. GOVINDARAJAN, June 11, 2016). However, in the present study, financial health

of Pharmaceutical industry is measured from the perspectives of Liquidity Analysis. Objective of the study is to explore and analyze the liquidity position of selected pharmaceutical companies.

2. LITERATURE REVIEW

Altman (1968) has studied the financial ratios, discriminant analysis and the prediction of corporate bankruptcy. The purpose of the study was to attempt the assessment of the issue – the quality of the ratio analysis as an analytical techniques. The questions which ratios are the most important in detecting bankruptcy potential, what weights should be attached to those ratios and how the weights should be established, needed to be answered and concluded that the overall performance of the India Cements Ltd. is good.

Bhunia and Sarkar (2011) has built up a model to develop the predictive abilities for company failures in a later time frame with different financial, business and operating conditions in the Indian context. A total of sixty-four private sector pharmaceutical

companies were analyzed with sixteen financial ratios using multiple discriminant analysis. A strong discriminant function was constructed with seven ratios found to be significant in discriminating power and the classification results showed high predictive accuracy rates of between 88% and 94% for each of the 5 years prior to actual failure. This study also indicated that even with more advanced statistical tools more popularly used recently, MDA is still a very reliable and potent statistical tool.

Bhunia and Sarkar (2011) identifies the financial strengths and weaknesses of the Indian public sector pharmaceutical enterprises by properly establishing relationships between the items of the balance sheet and profit and loss account. The study covers two public sector drug and pharmaceutical enterprises listed on BSE. The study has been undertaken for the period of 12 years from 1997-1998 to 2008-2009 and the necessary data have been obtained from CMIE database. The liquidity position was strong for the selected Indian Public Sector Pharmaceutical enterprises. However, financial stability of the companies under study showed a downward trend and consequently the financial stability of the companies under study has been decreasing at an intense rate.

Sanghani (2015) examined the new approach to profitability, liquidity, asset management and overhead cost structure analysis. The researcher has work with selected oil refineries. The refineries like BPCL, IOC, HPCL, MRPL, NRL, and CPCL for 10 the period 2007-2008 to 2011-2012. The financial performance of oil refineries has been measure through various tools like DuPont analysis for ROE, Ratio analysis, Edward Altman model and overhead cost structure. The statistical techniques like analysis of variance and factor analysis are also used for testing the hypothesis. This study concluded that the financial ratios are the simplest tools for evaluating the financial performance of the firm.

Hiral (2015) has conducted a solvency analysis of selected pharmaceutical companies in India. He has studied top four pharmaceutical brands viz. Lupin, Dr. Reddy's Lab, Cadila Health Care, and Cipla. The period of the study was 5 years from 2010-2011 to 2014-2015. They have studied the liquidity and solvency using various accounting ratio and analyzed with the help of averages, standard deviation and coefficient of variation. The author has concluded that all the firms have ability to pay their debt timely. However Dr Reddy's lab and Cadila health has high debt ratio. Debtor turnover ratio and Cipla and Cadila Health are quite better than others. Interest coverage ratio is better in case of Lupin is quite high, show their efficiency in timely meeting their interest payments.

Ebrati et al. (2013) has analyzed the impact of capital structure on the company's performance. The study uses profitability ratios as dependent variables and capital structure ratios as independent variables. The results show that the ROAs and earnings per share associate negatively with the capital structure.

3. HYPOTHESIS TESTING

Hypothesis is a proposed explanation for a phenomenon. Hypothesis is a specific, testable prediction. It describes in concrete

terms what you expect will happen in a certain circumstance. Hypothesis is used in an experiment to define the relationship between two variables. A formalized hypothesis will force us to think about what results we should look for in an experiment." The hypothesis of the research has been formulated as under:

Null Hypothesis: H_0 - There is no significance difference between Liquidity positions of selected pharmaceutical companies.

Alternative hypothesis: H_1 - There is significance difference between Liquidity positions of selected pharmaceutical companies.

To analyze the above hypothesis the supporting hypothesis are as under:

(1) H_{0a} : In the period for research undertaken the Current proportion (ratio) remains same for chosen Pharmaceutical firms.

H_{1a} : In the period for research undertaken the Current proportion (ratio) does not remains same for chosen Pharmaceutical firms.

(2) H_{0b} : In the period for research undertaken the Liquid proportion (ratio) remains same for chosen Pharmaceutical firms.

H_{1b} : In the period for research undertaken the Liquid proportion (ratio) does not remains same for chosen Pharmaceutical firms.

4. DATA COLLECTION AND METHODOLOGY

There are two types of data (1) primary data and (2) secondary data. Primary data are those data which are collected for the 1st time, to meet the objective of research only. Secondary data is data which has been already collected and used for any other purpose by someone and can be used for this research also. This study is based on financial statements of companies, which is secondary data. Data are collected from annual reports of the selected companies. Further information obtained from Society of Indian pharmaceutical manufacturers (SIAM), Magazines, News Papers, various Journals and websites etc.

To check the consistency and stability of selected companies time period should be longer. So, the period of study has considered for 10 years i.e. financial year 2004-2005 to 2013-2014.

The universe of the study consists of all the limited companies working in India and listed in stock exchanges of India.

In the present study, the analysis of ten Pharmaceutical companies in India having time span of 2004-2005 to 2013-2014. The selection of pharmaceutical companies of Indian Pharmaceutical Industry is based on the segment that the companies which produce medicines and other pharmacy products.

The research is based on the data analysis of financial statement of the selected pharmaceutical companies. Profit and loss account, balance sheet and other statements, like working capital statement, cost of goods sold statement have been recast and presented in condensed form.

The ratio analyses is used as an accounting technique for the analysis and interpretation of the data. In this study, ratio analysis covers liquidity analysis. Descriptive statistics, graphical presentation, one way ANOVA between selected companies and selected years of Indian pharmaceutical industry are used to analyze liquidity position. Tools like EXCEL and SPSS17.0 are used to analyze data. For the analysis of the data collected here, the study focus around the use of different descriptive statistics as well as inferential statistics i.e. frequency distribution, cross tabs, charts, testing of hypothesis.

5. PERUSAL AND EXAMINATION OF LIQUIDITY

5.1. Instigation of Liquidity

Financial liquidity shows the firm's payment capability. The production and office expenses are always repeating day to day on continuation basis. In general sense, the increase and decrease of expanses mostly depends upon production and different policy of the firm or company. Character of management is good when maintains enough liquidity.

It is very much important for a company that before occurrence of dues the obligation must be accomplished. Any company may face failure to meet its commitments because of less level of liquidity, which in turn leads to poor credit structure, exploitation of confidence of creditors or it may lead to closing down of company by legal procedures.

5.2. Concept of Liquidity

The short-term position, condition and structure will be checked with the help of liquidity analysis under financial management. Under the definition of liquidity, it is the realization of money from a real asset. Usually the liquidity shows the conversion of current assets into cash within a year and money have ensured for daily operations and work. Hence, the timely payments of dividends, interests to outsiders because cash is converted within a year.

5.3. Liquidity Perusal and Examination of Selected Pharmaceutical Industry

The detail analysis is as follows:

- Proportion of Current assets to current Liabilities (CR)
- Proportion of liquid assets to current liabilities (LR)

5.4. Current Proportion (Ratio)

The one of the basic test to analyze short term financial position of the company is Current proportion (ratio). It shows how a company will manage is short term assets and liabilities to tackle its day to day operations of the business. Current proportion (ratio) can be greater or smaller than two. If it is high than or equal to two it shows that commitments made by firm are fulfilled for short term purpose otherwise vice-versa. It's formula as shown below:

5.4.1. CR is equal to current assets of the firm/current liabilities of the firm

Solvency aspect in the company/firm can be checked through parallel relation reflecting in regard to current proportion of assets

and liabilities and the thumb rule is 2:1. Current proportion (ratio) is always preferred from higher side because leads to creditor's protection with help of M.o.S (margin of safety), the larger the margin of safety, the current commitments' will be met by firm as obligation. Hence, higher Current proportion (ratio) is not acceptable as it shows under utilization of assets. Relationship of Current assets to current liabilities of the chosen companies of pharmaceutical sector reflects from the Table 1, and also shows the relation in relative terms as times. Deductions extracted from Table 1 and Chart 1 are as follows.

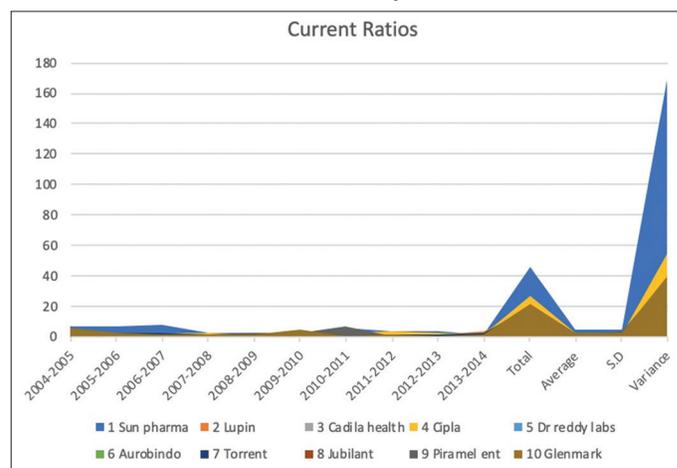
Current ratio of Sun pharma changes from 6.6 to 1.4 times for specific period under consideration. Gross variation/change within the specify analysis period shown by Current proportion (ratio). The Current proportion of Sun pharma was higher in the year 2006-2007 ratio value calculated was 8.43 times, while lower was marked in the year 2013-2014 and ratio value calculated was 1.4 times and this was the less value than the proportion of pharmaceutical industry. The normal deviation (Standard Change) was 4.744 times and Symbiotic of fluctuation (Co-efficient of Variation) was 168.269%.

In Lupin Pharmaceuticals, Inc, the Range of the Current proportion (ratio) reflects the change from 1.22 (2004-2005) to 3.45 times (2013-2014) reflects the average proportion of 1.776 times. The normal deviation (Standard Change) shows the figure 1.295 which reflects the lower value than the proportion of other companies and Symbiotic of fluctuation (Co-efficient of Variation) was 24.44%.

In Cadila Pharmaceuticals, Inc, the Range of the Current proportion (ratio) reflects the change from 1.41 (2004-2005) to 1.33 times (2013-2014). The normal deviation (Standard Change) shows the figure 0.4871 which reflects the lower value than the proportion of other companies and Symbiotic of fluctuation (Co-efficient of Variation) was 15.2761%.

For Cipla Ltd. the Current proportion changes from 2.14 times to 2.11 times for specific period undertaken for research and reflects the average proportion of 2.687 times which high than the proportion of pharmaceutical sector taken under consideration for

Chart 1: Current proportion of the chosen pharmaceutical company under study



present research by researcher. The normal deviation (Standard Change) was 1.25 times and Symbiotic of fluctuation (Co-efficient of Variation) was 53.916%.

In Dr. Reddy labs Ltd., the Range of the Current proportion (ratio) reflects the change from 2.37 to 1.63 times and reflects the average proportion of 1.872. The normal deviation (Standard Change) shows the figure 0.846 which reflects the lower value than the proportion of other companies and Symbiotic of fluctuation (Co-efficient of Variation) was 26.145%.

Current proportion of Aurobindo Pharma reflects the change from 1.65 to 1.53 times for specific period taken. Gross variation/change within the specify analysis period shown by Current proportion (ratio). It was high in the year 2006-2007 ratio value calculated was 2.28 times, while lower was marked in the year 2010-2011 and ratio value calculated was 1.22 times. The normal deviation (Standard Change) was 0.73 times and Symbiotic of fluctuation (Co-efficient of Variation) was 19.65%.

In Torrent Ltd., the Range of the Current proportion (ratio) reflects the change from 1.6(2004-2005) to 2.43 times (2006-2007) and reflects the average proportion of 1.986. The normal deviation (Standard Change) shows the figure 0.609 which reflects the lower value than the proportion of other companies and Symbiotic of fluctuation (Co-efficient of Variation) was 29.22%.

In Jubilant, the Range of the Current proportion (ratio) reflects the change from 1.56 (2004-2005) to 1.31 times (2006-2007) and reflects the average proportion of 1.39. The normal deviation (Standard Change) shows the figure 0.98 which reflects the lower value than the proportion of other companies and Symbiotic of fluctuation (Co-efficient of Variation) was 14.87%.

For Piramal ENT. Ltd. the Current proportion changes from 1.14 times to 0.53 times for specific period undertaken for research and reflects the average proportion of 2.06 times which is higher than the proportion of pharmaceutical sector taken under consideration. The normal deviation (Standard Change) was 3.59 times and Symbiotic of fluctuation (Co-efficient of Variation) was 37.39%.

In Glenmark, the Range of the Current proportion (ratio) reflects the change from 5.46 to 1.3 times and reflects the average proportion of 2.188. The normal deviation (Standard Change) shows the figure 3.185 and Symbiotic of fluctuation (Co-efficient of Variation) was 40.07%.

5.5. ANOVA Test of Current Proportion (Ratio)

H_0 : In the period for research undertaken the Current proportion (ratio) remains the same for chosen Pharmaceutical firms.

H_1 : In the period for research undertaken the Current proportion (ratio) does not remains the same for chosen Pharmaceutical firms (Table 2).

As the calculated figure of F shows the extended/more point value, corresponding to F- critical value, it means value of P has the shorter point of influence than 0.05. Therefore, it can be deduced that null hypothesis will not be spurned down which in turn reflects that in the period for research undertaken the Current proportion (ratio) does not remains the same for chosen pharmaceutical firms (Table 3).

As the calculated figure of F shows the short/less point value, corresponding to F- critical value, it means value of P has the greater point of influence than 0.05. Therefore, it can be deduced

Table 1: Current proportion of the chosen pharmaceutical company under study from 2003-2004 to 2013-2014 (in times)

S. no.	1	2	3	4	5	6	7	8	9	10	
Company name	Sun pharma	Lupin	Cadila health	Cipla	Dr reddy labs	Aurobindo	Torrent	Jubilant	Piramel ent	Glenmark	
Current ratio of the individual selected pharmaceutical companies under study: From 2004-2005 to 2013-2014 (In Times)	2004-2005	6.6	1.22	1.41	2.1	2.4	1.7	1.6	1.56	1.1	5.46
	2005-2006	7.35	1.85	1.53	2.4	1.5	1.7	2.38	1.9	1.5	2.66
	2006-2007	8.43	1.93	1.38	3	2.7	2.3	2.43	1.31	1.8	1.64
	2007-2008	2.87	1.57	1.43	3	1.9	2.1	1.98	2.04	1.9	2.02
	2008-2009	2.92	1.22	1.34	2	2	1.7	2.06	1.73	2.8	1.98
	2009-2010	2.65	1.5	1.88	2.4	1.6	1.5	1.94	1.81	2.6	4.38
	2010-2011	5.97	1.52	1.78	2.8	1.4	1.2	1.6	1.23	6.7	0.44
	2011-2012	3.9	1.49	1.18	4.1	1.6	1.1	1.72	1.06	0.9	1.17
	2012-2013	3.37	2.01	1.09	3	1.6	1.3	1.86	0.77	0.8	0.83
	2013-2014	1.4	3.45	1.33	2.1	2.2	1.5	2.29	0.58	0.5	1.3
	Total	45.5	17.8	14.35	27	19	16	19.86	14	21	21.88
	Average	4.55	1.78	1.435	2.7	1.9	1.6	1.986	1.4	2.1	2.188
	S.D	4.71	1.29	0.4871	1.3	0.8	0.7	0.61	0.99	3.6	3.185
	Variance	168	24.4	15.276	54	26	20	29.22	14.9	37	40.07

Table 2: Perusal and examination of variance test companies-wise (ANOVA) of current proportion (ratio)

Anova (variation source)	S.S.	D.o.F	M.S.	F-value	P-value	F critical value
Treatment for groups	234.7796	29	8.09585	8.442849	3.55E-24	1.509627
Treatment within groups	258.9031	270	0.9589			
Total	493.6827	299				

that null hypothesis will be spurned down which in turn reflects that in the period for research undertaken the Current proportion (ratio) remains the same.

5.6. Liquid Ratio

Liquid ratio explains the relationship between liquid assets and current liabilities. The liquid ratio is an advanced test of liquidity than the Current proportion (ratio) because Current proportion (ratio) does not reflect the most liquid position. Liquid ratio reflects the immediate availability of cash to meet the obligations of the firm. The calculation is as follows:

5.6.1. Liquid ratio is equal to the liquid assets/liquid liabilities

The ideal Liquidity Ratio is considered to be 1:1. It means that the firm has sufficient amount to pay liquid liabilities. Liquidity ratio to the higher side is desirable because it indicates that the ability to meet with liquid liabilities, while lower ratio is not desirable because it may be creates a serious problem for any firm (Table 4).

5.7. Deductions Extracted from the Table 4 and Chart 2 are as Follows

Liquidity ratio of Sun pharma change from 5.89 times to 1.15 times for specific period undertaken for research. Gross variation/change within the specify analysis period shown by Current proportion (ratio). The proportionate amount of value of the Liquidity ratio of Sun Pharma was 3.83 times and this was the less value than the proportion of pharmaceutical industry. The normal deviation (Standard Change) was 2.14 times and Symbiotic of fluctuation (Co-efficient of Variation) was 4.58%.

In Lupin Pharmaceuticals, Inc, the Liquidity ratio changes to the scenario between 1.04 times in 2009-2010 and 2.51 times in 2013-2014 and reflects the average proportion of 1.2 times. The normal deviation (Standard Change) was 0.516 times and Symbiotic of fluctuation (Co-efficient of Variation) was 0.266%.

In Cadila Healthcare Ltd. the Liquidity ratio changes to the scenario between 0.82 times in 2004-2005 and 0.09 times in 2013-2014 and reflects the average proportion of 0.928 times. The normal deviation (Standard Change) was 0.165 times and Symbiotic of fluctuation (Co-efficient of Variation) was 0.027%.

For Cipla Ltd., Liquidity ratio has changed from 1.23 to 1.07 times for specific period undertaken for research. The proportionate amount of value of the Cipla Ltd. was 1.62 times. The normal deviation (Standard Change) was 0.44 times and Symbiotic of fluctuation (Co-efficient of Variation) was 0.20%.

Chart 2: Liquid ratio of the selected individual pharmaceutical company under study

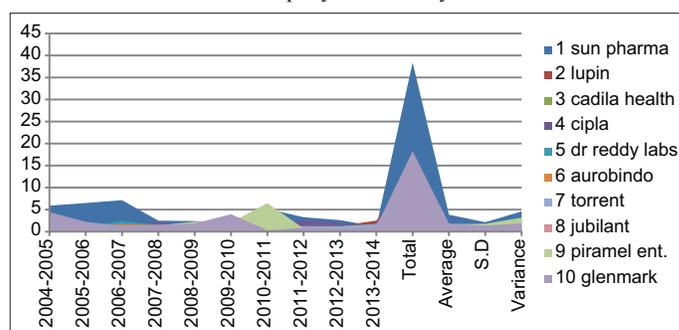


Table 3: Perusal and Examination of Variance Test Year-wise (ANOVA) of Current proportion (ratio)

Anova (variation Source)	S.S.	D.o.F	M.S.	F-Value	P-value	F- critical Value
Treatment for Groups	8.463017	9	0.940335	0.562022	0.827736	1.912236
Treatment Within Groups	485.2075	290	1.673129			
Total	493.6705	299				

Table 4: Liquid ratio of the selected individual pharmaceutical companies under Study from 2004-2005 to 2013-2014 (in times)

	S. no.	1	2	3	4	5	6	7	8	9	10
	Company name	Sun pharma	Lupin	Cadila health	Cipla	Dr reddy labs	Aurobindo	Torrent	Jubilant	Piramel ent.	Glenmark
Quick ratio of the individual selected pharmaceutical companies under study: From 2004-2005 to 2013-2014 (In Times)	2004-2005	5.89	0.77	0.82	1.23	2	1.11	0.69	1	0.57	4.43
	2005-2006	6.5	1.42	0.99	1.39	1.18	1.25	1.37	1.25	0.98	2.23
	2006-2007	7.14	1.41	0.82	1.96	2.35	1.72	1.37	0.84	1.27	1.3
	2007-2008	2.49	1	0.94	2.07	1.55	1.51	1.39	1.44	1.4	1.53
	2008-2009	2.4	0.74	0.87	1.33	1.57	1.24	1.59	1.33	2.26	1.86
	2009-2010	1.75	1.04	1.27	1.69	1.16	0.99	1.49	1.37	2.06	3.95
	2010-2011	5.18	0.99	1.14	1.66	0.99	0.75	1.14	0.99	6.47	0.3
	2011-2012	3.27	0.93	0.79	2.52	1.17	0.68	1.24	0.66	0.72	0.89
	2012-2013	2.61	1.3	0.74	1.98	1.25	0.79	1.23	0.49	0.75	0.68
	2013-2014	1.15	2.51	0.9	1.07	1.78	1.02	1.69	0.36	0.49	1.13
	Total	38.38	12.11	9.28	16.9	15	11.06	13.2	9.73	16.97	18.3
	Average	3.838	1.211	0.928	1.69	1.5	1.106	1.32	0.97	1.697	1.83
	S.D	2.1422	0.516	0.1659	0.44806	0.4356	0.3346	0.27737	0.38	1.7824	1.3672
Variance	4.5891	0.266	0.0275	0.20076	0.1898	0.112	0.07693	0.15	3.177	1.8692	

Table 5: Perusal and examination of variance test companies-wise (ANOVA) of liquid ratio

Anova (variation source)	SS	D.o.F	MS	F	P-value	F crit
Treatment for groups	1,220,857	29	42098.53	3.699196	6.82E-09	1.509627
Treatment within groups	3,072,723	270	11380.46			
Total	4,293,580	299				

Table 6: Perusal and examination of variance test year-wise (ANOVA) of liquid ratio

Anova (variation source)	S.S.	D.o.F	M.S.	F-value	P-value	F critical value
Treatment for groups	10.015087	9	1.112787	0.967162	0.467387	1.912236
Treatment within groups	333.6652367	290	1.15057			
Total	343.6803237	299				

In Dr. Reddy labs Ltd; the Liquidity ratio changes to the scenario between 2 times to 1.78 times for specific period undertaken for research and reflects the average proportion of 1.5 times. This ratio showed fluctuated trend analysis period of the study. The normal deviation (Standard Change) was 0.435 times and Symbiotic of fluctuation (Co-efficient of Variation) was 0.189%. This has shown lower fluctuation in Liquidity ratio (turnover) ratio.

Liquidity ratio of Aurobindo Pharma changes from 1.11 times to 1.02 times for specific period undertaken for research. Gross variation/change within the specify analysis period shown by Current proportion (ratio). The proportionate amount of value of the Liquidity ratio was 1.106 times. The normal deviation (Standard Change) was 0.334 times and Symbiotic of fluctuation (Co-efficient of Variation) was 0.111%.

In Torrent, the Liquidity ratio changes to the scenario between 0.69 times in 2004-05 and 1.69 times in 2013-2014 and reflects the average proportion of 3.32 times. The normal deviation (Standard Change) was 0.277 times and Symbiotic of fluctuation (Co-efficient of Variation) was 0.076%.

In Jubilant the Liquidity ratio changes to the scenario between 1 times in 2004-2005 and 0.36 times in 2013-2014 and reflects the average proportion of 0.973 times. The normal deviation (Standard Change) was 0.380 times which reflects the lower value than the proportion of other companies, and Symbiotic of fluctuation (Co-efficient of Variation) was 0.45%.

For Piramal ENT. Ltd. the Liquidity ratio (turnover) ratio changes from 0.57 times to 0.49 times for specific period undertaken for research. The proportionate amount of value of the Current was 1.697 times. The normal deviation (Standard Change) was 1.782 times and Symbiotic of fluctuation (Co-efficient of Variation) was 3.17%.

In Glenmark the Liquidity ratio proportion changes to the scenario between 4.43 times to 1.13 times for specific period undertaken for research and reflects the average proportion of 1.8 times. This ratio showed fluctuated trend analysis period of the study. The normal deviation (Standard Change) was 1.36 times and Symbiotic of fluctuation (Co-efficient of Variation) was 1.86%. This has shown lower fluctuation in Liquidity ratio.

5.8. ANOVA Test of Liquid Ratio

H_0 : In the period for research undertaken the Liquid ratio remains the same for chosen Pharmaceutical firms.

H_1 : In the period for research undertaken the Liquid ratio does not remains the same for chosen Pharmaceutical firms.

As the calculated figure of F shows the extended/more point value, corresponding to F- critical value, it means value of P has the shorter point of influence than 0.05. Therefore, it can be deduced that null hypothesis will not be spurned down which in turn reflects that in the period for research undertaken the Liquid ratio does not remains the same for chosen pharmaceutical firms (Table 5).

As the calculated figure of F shows the short/less point value, corresponding to F- critical value, it means value of P has the greater point of influence than 0.05. Therefore, it can be deduced that null hypothesis will be spurned down which in turn reflects that in the period for research undertaken the Liquid ratio remains the same for chosen pharmaceutical firms (Table 6).

6. FINDINGS AND CONCLUSION

The summary showing the facts is as follows:

1. Sun pharma, Piramal, GlaxoSmithKline, Sanofi, Shilpa Medicare, FDC, Pfizer, Unichem Labs, Abbott India and Glen mark companies have average current ratio more from the standard rule that is 2:1. It reflects that liquidity level of the firms is fine and stable. But Lupin, Cadila, Aurobindo, Jubilant etc. has average current ratio less than specified norms which means the liquidity level of these companies was not good than the other companies undertaken for research. It has deduced here that the average current proportion of assets and liabilities for a year reflects the variable function for trends. Thus, analysis describes the in consistency in policy formulation regarding current liabilities and assets as well as performance of companies.
2. By applying ANOVA test, the null hypothesis of current ratio is not rejected. As a result, during the period of research undertaken the Current proportion (ratio) does not remains same for chosen Pharmaceutical firms but when the year-wise analysis has done, it results in rejection of null hypothesis which means during the period of research undertaken the Current proportion (ratio) remains same for chosen for calculated years in all aspects.
3. An average Quick ratio of all ten companies selected was more or equal to the desired level of Ratio which was 1:1. It reflects the variable trend.
4. By applying ANOVA test, the null hypothesis of quick ratio is not rejected. As a result, during the period of research

undertaken the Current proportion (ratio) does not remains same for chosen Pharmaceutical firms But when the year- wise analysis has done, it results in not rejection of null hypothesis which means during the period of research undertaken the Current proportion (ratio) does not remains same for chosen for calculated years in all aspects.

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