SIZE OF WORKING CAPITAL ANALYSIS OF SUN PHARMACEUTICALS LIMITED

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Abstract
Without working capital, no one company can run smoothly. So, working capital plays a vital role to manage financial position of a company. In this paper, size of the working capital analysis of the Sun Pharmaceuticals Limited, has been discussed. For this analysis, the researcher has taken five variables like net working capital, current ratio, liquid ratio, current assets to total assets ratio, current assets to sales that has to examine the size of working capital analysis of the selected pharmaceutical company Sun Pharmaceuticals Limited in India. The study period has taken as pass 10 years ie., 2008-09 to 2017-18. The simple statistical tools like Mean, SD, Coefficient of Variation and 't' test with 'p' value, Correlation analysis has applied. The results showed that the variables net working capital, current ratio, current assets to total assets ratio and current assets to sales ratio of Sun Pharmaceuticals Limited are not having uniform growth during the study period. On the other hand, the variable liquid ratio of Sun Pharmaceuticals Limited is having uniform growth during the study period.

Keywords : Sun Pharma, Working Capital, Size, Pharmaceuticals Company.

Introduction

Working capital is the portion of an enterprise's total capital which is employed in short-term operations, such as, current assets. A typical list of these assets in order of liquidity includes cash in hand and at bank, short-term investment, payments in advance, accounts receivables, raw materials inventory, and inventory of goods in process and finished goods inventory. The management of all these current assets assumes greater importance because the sum total of investment in current assets forms over one-half of an enterprise's total assets. Besides, liquidity and profitability, the two desired goals of financial management are directly affected by working capital management performance. As the size of working capital increase, both the enterprise's risk and return would decrease and vice-versa. Since, the current assets (working capital) affect the risk return trade off to be achieved by the enterprise, the study of structure, sources and utilization appears to be one of the important areas of investigation on working capital management.

Review of Literature

The researcher Asha Sharma (2011) found that there was a significant negative relationship among liquidity and profitability. Also, the researcher explored that these proportions stayed unaltered for any industry or differs starting with one industry then onto the next. The results concluded that the liquidity, productivity, benefit relationship of vehicle industry and pharmaceutical industry in India watched a noteworthy positive relationship for the two factors. According to Madhuri Mahato (2011) study, it is confirmed that there was no significant variation in the CAGR levels among the high, medium and low classification firms. In addition, it was insignificant that the irrelevant performance variations in the high, medium and low classification firms of the Indian pharmaceutical segment can be halfway credited to the synergistic help from the administration, business and general wellbeing arrangement. In focus of Barot Haresh (2012) revealed that there was a negative relationship between accounts receivables and corporate profitability and a positive relationship between accounts payable and profitability. From the

study, it was concluded that profitability can be enhanced if firms manage their working capital in a more efficient way. The results from Wajid Khan et al. (2013) study, it is observed that the financial performance was significantly affecting the dividend behavior of the two sectors. It was confirmed that dividend declaration expanded the firm esteem and emphatically impact the profitability. Also, the results showed that profitability of any firm positively affected dividend payouts while leverage had no significant effect on firm dividend payouts. Moreover, the control variable log of absolute resources additionally emphatically influenced the profit payout of the two ventures. The study results from Ashok Kumar Panigrahi (2014) explored that there was a positive relationship among's liquidity and benefit of Lupin. Also, the connection between money change cycle proved that there was a positive yet unimportant relationship. Further, it was identified that there existed a positive connection between the gainfulness proportions of Lupin and the level of conservativeness of working capital speculation and financing approaches.

According to Alin Constantin Radasanu (2015), it is identified that short-term sources more especially trade credit and different payables assume a noteworthy job in financing working capital. Besides, the Short-term and long-term bank credit played a critical as well as an overwhelming job as a noteworthy outer wellspring of financing working capital prerequisite. It was presumed that merchants had performed well similar to the exhibition of working capital, use of current resources for create deals and effectiveness of working capital for makers. The authors Vijayalakshmi and Srividya (2015) analysed that the financial health played a significant role in the successful management of a company. It was proved that working capital turnover ratio, working capital to net worth, net working capital to current liabilities and net sales to net worth, had significant effect on the net profit ratio of the selected pharmaceutical companies during the study period. The results from Aravind (2016), it is analysed that Cash Conversion Cycle was positively correlated to net profit ratio but negatively related to the return on equity. Also, the Indian manufacturing firms were having high days payable outstanding while keeping up a moderate days sales outstanding and days inventory outstanding. From the results, it was inferred that the impact of working capital on gainfulness was predictable independent of the monetary cycle. From the view of Ayub Ahamed (2017) study, it is concluded that decision relating to working management involved managing the relationship between a firms short term assets and its short term liabilities. The comparative study of different pharmaceutical companies of working capital management, the net working capital was good with Lupin. Further, Dr.Reddy and Cipla but negative with the Sun pharmacy that showed company had an obstacle in day to day operation that as properly not maintained. It is showed from Siva Rama Prasad and Hima Lakshmi (2018) study that the productivity emphatically connected with current proportion and speedy proportion though working capital turnover proportion and receivables turnover proportion contrarily connected with benefit of the organizations. This research concluded that the productivity emphatically connected with fast proportion and supreme fluid proportion while normal accumulation period contrarily connected with gainfulness of the organizations for medium size pharma organizations.

Statement of The Problem
After implementation of demonetization, all the industries have faced more financial crisis. In particularly Pharmaceutical industry, that is a booming sector ie., health industry, faced more problems in maintaining their financial position. Introduction of digital economy system, pharmaceutical companies have faced more financial problems like working capital maintenance. So, the researcher has selected pharmaceutical industry because of health industry, and examine the working capital position of the industry. Among the various companies has played in India, the researcher has selected a company

Sun Pharmaceutical Limited because the company faced more working capital problems in the recent years. So, the research has selected the company.

Objectives of The Problem
- To study the working capital position of the Sun Pharmaceuticals Limited.
- To examine the size of working capital analysis of the Sun Pharmaceuticals Limited.

Research Methodology
The study is purely analytical as well as descriptive research. This research has selected Sun Pharmaceuticals Limited for examining the size of working capital performance for the year 2008-09 to 2017-18. The collected data were analysed by using five working capital ratios and the ratios has evaluated through statistical tools like Mean, SD, Coefficient of Variation, 't' test and correlation coefficient. The results of the tools has discussed in the following table.

Data Analysis and Interpretation
In this section, the researcher has selected a pharmaceutical company, Sun Pharmaceuticals Limited. The size of the working capital analysis has been calculated through selected five ratios that is given below. The networking capital ratio has calculated by using the following formula.

Net Working Capital = Current Assets - Current Liabilities
In order to examine the difference of net working capital during the study period, the following null hypothesis has framed and tested by using 't' test.

H_0 : There is no significant difference of Net Working Capital Ratio during the study period.

Table 1 : Net Working Capital Ratio

No.	Year	Current Assets	Current Liability	Ratio (In Times)
1	2008-09	1186.9	696.3	490.6
2	2009-10	1149.5	388.5	761.1
3	2010-11	2411.8	442.4	1969.4
4	2011-12	2681.3	598.7	2082.6
5	2012-13	2037.4	674.8	1362.6
6	2013-14	1512.6	807.9	704.7
7	2014-15	4408.5	4747.0	-338.4
8	2015-16	4318.4	3692.8	625.5
9	2016-17	5193.3	5061.9	131.4
10	2017-18	5137.9	4605.1	532.8
	Mean			**832.2**
	SD			**765.2**
	CV (%)			**91.95**
	't' Test			**3.439**
	'p' Value			**0.007***

Note : * - Significant at 1% level

It is explored from the above analysis that the mean and SD values of net working capital endowed by 832.2 and 765.2 respectively. The co-efficient of variation of net working capital registered by 91.95%. The result of 't' test and it's 'p' value inferred that the hypothesis is rejected during the study period. It indicates that there is a significant difference of Net Working Capital Ratio during the study period. So, net working capital of Sun Pharmaceuticals Limited is not having uniform growth during the study period.

Chart 1 : Net Working Capital Ratio
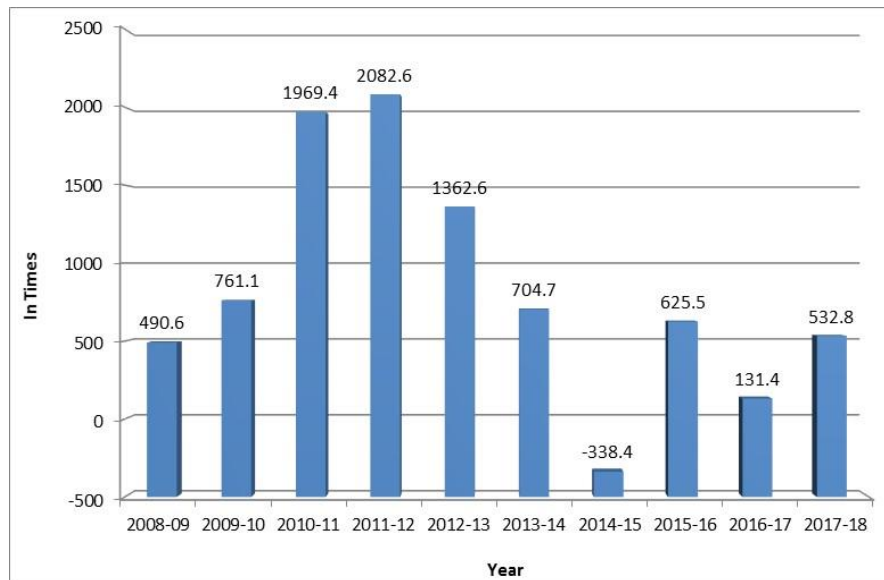
Table 2 : Current Ratio

The current ratio has been calculated by using the following formula.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

In order to examine the difference of current ratio during the study period, the following null hypothesis has framed and tested by using 't' test.

H_0 : There is no significant difference of Current Ratio during the study period.

Table 2 : Current Ratio

No.	Year	Current Assets	Current Liability	Ratio (In Times)
1	2008-09	1186.9	696.3	1.70
2	2009-10	1149.5	388.5	2.96
3	2010-11	2411.8	442.4	5.45
4	2011-12	2681.3	598.7	4.48
5	2012-13	2037.4	674.8	3.02

No.	Year	Current Assets	Current Liability	Ratio (In Times)
6	2013-14	1512.6	807.9	1.87
7	2014-15	4408.5	4747.0	0.93
8	2015-16	4318.4	3692.8	1.17
9	2016-17	5193.3	5061.9	1.03
10	2017-18	5137.9	4605.1	1.12
	Mean			**2.37**
	SD			**1.57**
	CV (%)			**66.34**
	't' Test			**4.769**
	'p' Value			**0.001***

Note : * - Significant at 1% level

It is revealed from the above analysis that the mean and SD values of current ratio endowed by 2.37 and 1.57 respectively. The co-efficient of variation of current ratio registered by 66.34%. The result of 't' test and it's 'p' value determined that the hypothesis is rejected during the study period. It shows that there is a significant difference of current ratio during the study period. Hence, current ratio of Sun Pharmaceuticals Limited is not having equal growth during the study period.

Chart 2 : Current Ratio
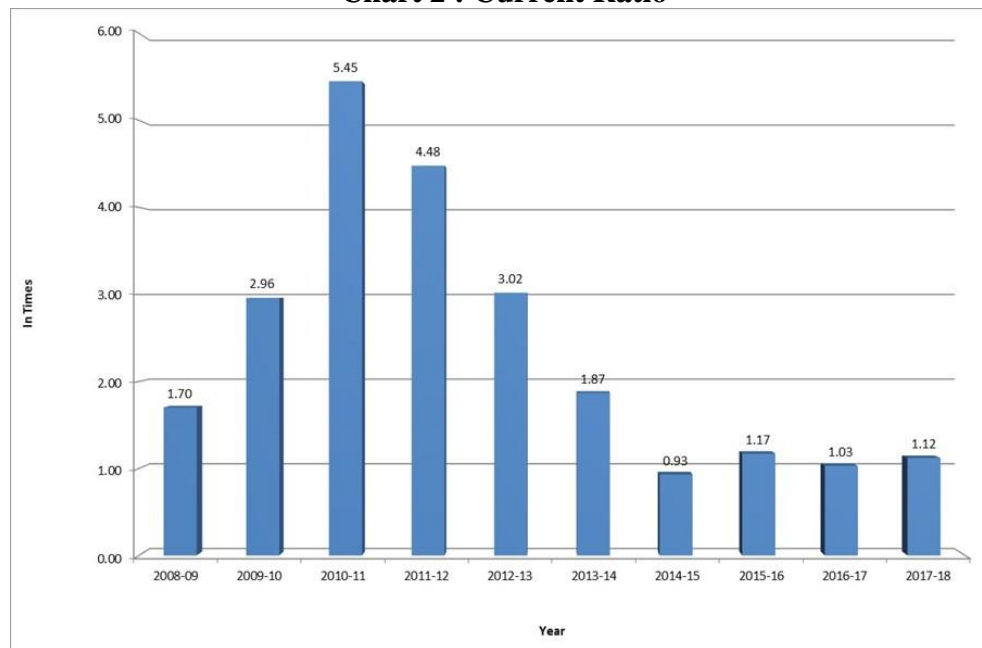
Table 3 : Liquid Ratio
The liquid ratio has been calculated by using the following formula.

$$\text{Liquid Ratio} = \frac{\text{Liquid Assets}}{\text{Liquid Liabilities}}$$

In order to examine the difference of liquid ratio during the study period, the following null hypothesis has framed and tested by using 't' test.

H_0 : There is no significant difference of Liquid Ratio during the study period.

Table 3 : Liquid Ratio

No.	Year	Liquid Assets	Liquid Liability	Ratio (In Times)
1	2008-09	20.17	696.3	0.03
2	2009-10	26.11	388.5	0.07
3	2010-11	1250.91	442.4	2.83
4	2011-12	1327.71	598.7	2.22
5	2012-13	431.12	674.8	0.64
6	2013-14	141.48	807.9	0.18
7	2014-15	416.46	4747.0	0.09
8	2015-16	169.39	3692.8	0.05
9	2016-17	170.28	5061.9	0.03
10	2017-18	155.27	4605.1	0.03
	Mean			**0.62**
	SD			**1.03**
	CV (%)			**167.58**
	't' Test			**1.890**
	'p' Value			**0.091[NS]**

Note : NS – Not Significant

It is examined from the above analysis that the mean and SD values of liquid ratio endowed by 0.62 and 1.03 respectively. The co-efficient of variation of liquid ratio registered by 167.58%. The result of 't' test and it's 'p' value observed that the hypothesis is accepted during the study period. It confirms that there is no significant difference of liquid ratio during the study period. So, liquid ratio of Sun Pharmaceuticals Limited is having uniform growth during the study period.

Chart 3 : Liquid Ratio
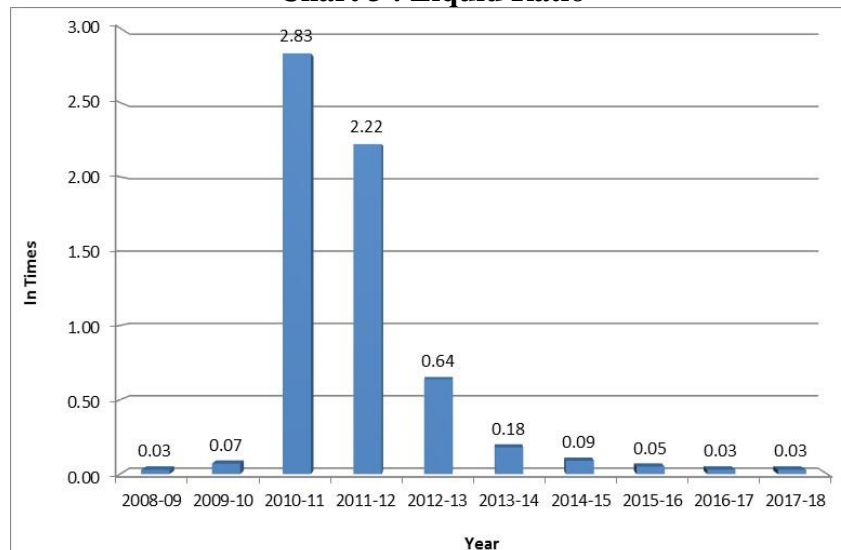
Table 4 : Current Assets to Total Assets Ratio

The Current Assets to Total Assets ratio has been calculated by using the following formula.

$$\text{Current Assets to Total Assets} = \frac{\text{Current Assets}}{\text{Total Assets}}$$

In order to examine the difference of Current Assets to Total Assets during the study period, the following null hypothesis has framed and tested by using 't' test.

H_0 : There is no significant difference of Current Assets to Total Assets Ratio during the study period.
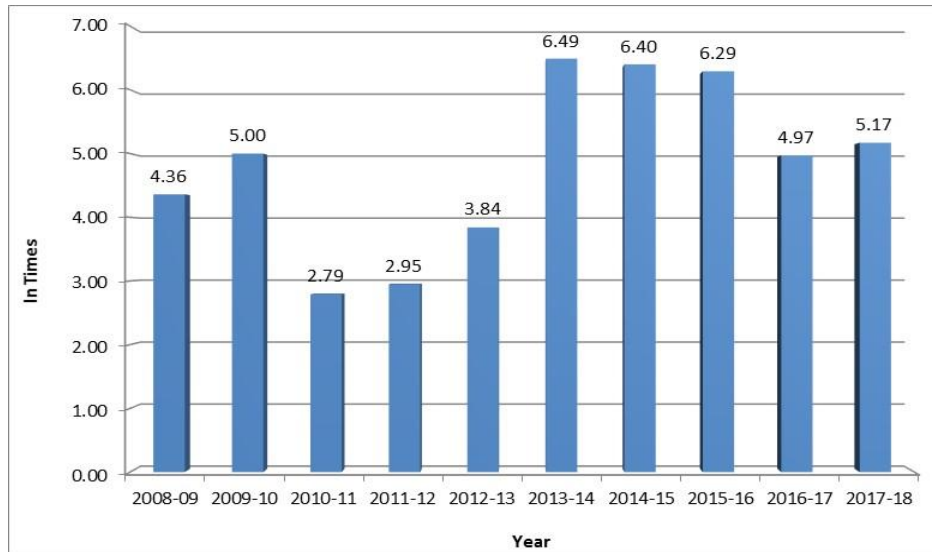
Table 4 : Current Assets to Total Assets Ratio

No.	Year	Current Assets	Total Assets	Ratio (In Times)
1	2008-09	1186.9	5175.0	4.36
2	2009-10	1149.5	5747.5	5.00
3	2010-11	2411.8	6731.1	2.79
4	2011-12	2681.3	7918.4	2.95
5	2012-13	2037.4	7832.0	3.84
6	2013-14	1512.6	9816.9	6.49
7	2014-15	4408.5	28209.4	6.40
8	2015-16	4318.4	27146.8	6.29
9	2016-17	5193.3	25827.2	4.97
10	2017-18	5137.9	26548.6	5.17
	Mean			**4.83**
	SD			**1.35**
	CV (%)			**27.95**
	't' Test			**11.301**
	'p' Value			**0.000***

Note : * - Significant at 1% level

It is indicated from the above analysis that the mean and SD values of current assets to total assets ratio endowed by 4.83 and 1.35 respectively. The co-efficient of variation of current assets to total assets ratio registered by 27.95%. The result of 't' test and it's 'p' value found that the hypothesis is rejected during the study period. It clears that there is a significant difference of current assets to total assets ratio during the study period. Hence, current assets to total assets ratio of Sun Pharmaceuticals Limited is not having equal growth during the study period.

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Chart 4 : Current Assets to Total Assets Ratio

Table 5 : Current Assets to Sales Ratio

The Current Assets to Total Assets ratio has been calculated by using the following formula.

                         Current Assets
Current Assets to Sales   =   ----------------------
                              Sales

In order to examine the difference of Current Assets to sales during the study period, the following null hypothesis has framed and tested by using 't' test.

H_0 : There is no significant difference of Current Assets to Sales Ratio during the study period.

Table 5 : Current Assets to Sales Ratio

No.	Year	Current Assets	Sales	Ratio (In Times)
1	2008-09	1186.9	2774.7	0.43
2	2009-10	1149.5	1845.1	0.62
3	2010-11	2411.8	3107.6	0.78
4	2011-12	2681.3	4015.6	0.67
5	2012-13	2037.4	2432.1	0.84
6	2013-14	1512.6	2828.8	0.53
7	2014-15	4408.5	8017.2	0.55
8	2015-16	4318.4	7614.5	0.57
9	2016-17	5193.3	7684.0	0.68
10	2017-18	5137.9	7923.8	0.65
	Mean			**0.63**
	SD			**0.12**

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	CV (%)			18.96
	't' Test			16.555
	'p' Value			0.000*

Note : * - Sig. at 1% level

It is concluded from the above analysis that the mean and SD values of current assets to sales ratio endowed by 0.63 and 0.12 respectively. The co-efficient of variation of current assets to sales ratio registered by 18.96%. The result of 't' test and it's 'p' value obtained that the hypothesis is rejected during the study period. It indicates that there is a significant difference of current assets to sales ratio during the study period. So, current assets to sales ratio of Sun Pharmaceuticals Limited is not having uniform growth during the study period.

Chart 5 : Current Assets to Sales Ratio
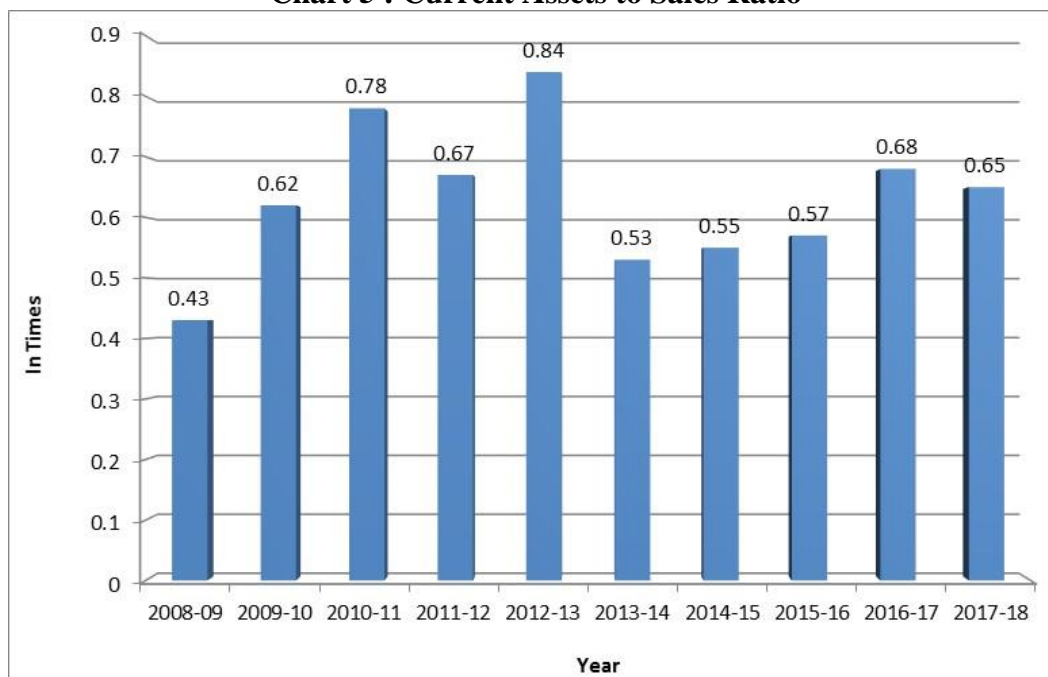
Degree of relationship between selected ratios (Correlation Analysis)
The relationship between the selected ratios has been found by using correlation analysis. The selected ratios for the study are Net Working Capital Ratio, Current Ratio, Liquid Ratio, Current Assets to Total Assets Ratio and Current Assets to Sales Ratio. The correlation results is decided to test whether there exists a high degree of correlation between the selected ratios of Sun Pharmaceuticals Limited during the study period.

Table 6 : Degree of relationship between selected ratios (Correlation Analysis)

Ratios	Net Working Capital Ratio	Current Ratio	Liquid Ratio	Current Assets to Total Assets Ratio	Current Assets to Sales Ratio
Net Working Capital Ratio	1.000				
Current Ratio	0.921*	1.000			
Liquid Ratio	0.865*	0.921*	1.000		
Current Assets to Total Assets Ratio	-0.817*	-0.833**	-0.799**	1.000	
Current Assets to Sales Ratio	0.576^{NS}	0.559^{NS}	0.537^{NS}	-0.588^{NS}	1.000

Note : * - Sig. at 1%; **-Sig. at 5%; NS-Not Significant.

The above table shows the relationship between the selected working capital ratios of Sun Pharmaceuticals Limited. It shows that except the relationship of the selected four variables with current assets to sales ratio are not significant association, all the relationships have significant association among them. But the association of current assets to total assets ratio with other working capital ratios have negative association that indicates proportion of current assets to total assets have associated with net working capital ratio, current ration and liquid ratio negatively.

Findings, Recommendations and Conclusion
Findings
- From the study, it is showed that there is a significant difference of Net Working Capital Ratio during the study period. So, net working capital of Sun Pharmaceuticals Limited is not having uniform growth during the study period.
- The study findings revealed that there is a significant difference of current ratio during the study period. Hence, current ratio of Sun Pharmaceuticals Limited is not having equal growth during the study period.
- It is observed from study results that there is no significant difference of liquid ratio during the study period. So, liquid ratio of Sun Pharmaceuticals Limited is having uniform growth during the study period.
- From the results, it is inferred that there is a significant difference of current assets to total assets ratio during the study period. Hence, current assets to total assets ratio of Sun Pharmaceuticals Limited is not having equal growth during the study period.
- It is concluded that there is a significant difference of current assets to sales ratio during the study period. So, current assets to sales ratio of Sun Pharmaceuticals Limited is not having uniform growth during the study period.
- The correlation analysis found that except the relationships of the selected four variables with current assets to sales ratio are not significant association, all the relationships have significant association among them.

Recommendations

- It is recommended to the Sun Pharmaceuticals Limited such as maintaining more current asset it's a sign of maintaining more inventories in hand, it shows they too cannot able to meet their short term obligations properly.
- The Sun Pharmaceutical Limited has liquidity position is fluctuating and it is not having uniform growth during the study period. So, the sales generating capacity of the Sun Pharmaceutical limited assets is increasing and it may improve its market position by which it may increase a competitive condition.
- In case of quick ratio, this study recommended that have to focus on maintaining more cash balances to meet their short term obligations.
- Further, Sun Pharmaceutical Limited should make a concerted effort in increasing the assets and reducing the liabilities so that the overall financial health position will be good and it will has grown in the future in all aspects.

Conclusion

This study focused the size of working capital analysis of Sun Pharmaceuticals Limited. Capital structure decisions have great impact on the pharmaceutical company financial performance. The determinants of working capital of selected company have been taken for analysis. This research examined the influence of determinants on capital structure, ratio analysis is carried out for the Sun Pharmaceuticals Limited. The independent variables like net working capital ratio, current ratio, current assets and current assets to sales ratio are found to be statically significant determinants of working capital. The results from 't' test associated with the variables are statistically significant at 1% level except Liquid Ratio. The above results concluded that the four ratios played a significant role in determining the capital structure of the Sun pharmaceutical Limited. So, it is revealed that the financial variables such as net working capital ratio, current ratio, current assets and current assets to sales ratio are the major determinants of the capital structure of the Sun Pharmaceutical Limited.

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