

A COMPARATIVE STUDY OF CASH FLOW STATEMENTS ANALYSIS OF SUN PHARMA LTD. AND DR. REDDY'S LABORATORY LTD

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ABSTRACT

A cash flow statement is a compulsory part of financial statements presented in annual general meetings. As per Ind AS -7 we should prepare cash flow statements structure. Activities of cash flow statements are classified in three parts: First is "Operating activities", Second one is "Investing activities", and last is "Financial activities" which all are essential for analysis of cash flow statements' data. In this study, period of study is taken from 2015 - 16 to 2019 - 20 for data analysis and interpretation. It contains two pharmaceutical companies, SUN PHARMA LTD. and DR. REDDY'S LABORATORY LTD. for this study on the basis of highest market capitalization.

Keywords: Cash Equivalents, Operating Activities, Investing Activities, Financing Activities, Liquidity.

Introduction

One of the key of success of every business is cash management. Cash composition of a company shows its liquidity, profitability and solvency. Need of cash in the business are to conduct their operations, to pay their obligations and to provide return to their investors.

In this study, the cash flow statements and its content about cash, which normally is a part of financial statements of any enterprise follows the rules of Ind AS 7 given by ICAI and is discussed in the light of the said accounting standard.

Literature Review

Kalpesh B. Gelda and Dr. Bhavsinh M. Dodiya has been done their work of research paper titled "A Comparative Study on Cash Flow Statements of Tata Chemicals Ltd. and Pidilite Industries Ltd." in the period of June 2014. The objective of this research paper is of providing information regarding comparative study on net cash flow from operating activities, investing activities and financing activities. This paper is concentrated and give us idea about the Study of Company's composition of cash which is important to know the impact of person's decision about cash flows that shows liquidity, profitability and solvency. It contains that in operating activity, Tata Company shows the best results in compare to another one and reverse position in case of other two activities. It had used mean, Standard deviation, and co – variance of the concerning data of the year 2008-09 to 2012-13.

Ross Kirkham (faculty at university of the sunshine coast, Queensland, Australia) had study on a "Liquidity Analysis Using Cash Flow Ratios and Traditional Ratios: The Telecommunications Sector in Australia" at the period in 2012. It has 25 companies and the data of 5 years which find outs similarities and differences between traditional ratios and cash flow ratios so that we can examine the value of liquid position of the corporate unit in the market. It results in that cash flow ratios are more powerful and better

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in the study of liquidity analysis with compare to traditional liquidity ratios and also gave a conclusion that even if there is sufficient amount of cash will be there with company, it will not show the liquid position or vice a versa. It highlights the advantages of Cash Flow ratios in interpretation of liquidity position.

Dr. Bhavsinh M. Dodiya and Kalpesh B. Gelda published a research paper in the year December, 2014 on comparative study of two banks which shows the trends of various cash flow activities i.e. operating, investing and financing activities for analysis of variation. It's one of the objective is to provide suggestions which can help to improve the cash management. In this study, T-Test was used as a statistical techniques and mean, co-efficient of variation and standard deviation as statistical tools for analysis. It concludes that HDFC is the best in investing and financing activities while SBI is best in operating activities.

Accounting Standard – 3 came into effect and prepared by Institute of Chartered Accountants of India – ICAI on 1st April, 1997 for statements of cash flows which are crucial to know various aspects about net cash flows, net cash flow from operating activities, net cash flow from investing activities, net cash flow from financing activities, foreign exchange transactions, reporting of statements, extraordinary items, interest and dividends, taxes on incomes, non-cash transactions, investments in subsidiaries, associates and joint ventures, components of cash and cash equivalents.

IND AS – 7 which is crucial matter for study of statement of cash flows which is prepared and presented by ICAI- Institute of Chartered Accountants of India. It becomes very important which includes the aspects and an information about which company will have to prepare it mandatory and all the legal provisions of preparation and presentation of C. F. S. Of the company as an integral part of financial statements for performance evaluation.

Objectives

- To study operating activities for the period of study of selected pharmaceutical companies.
- To study investing activities for the period of study of selected pharmaceutical companies.
- To study financing activities for the period of study of selected pharmaceutical companies.
- To evaluate discrepancy between cash flow statements' all activities of sample companies of pharmaceutical industry.

Research Methodology

Sample Selection

For the sample, two companies from Pharmasuitical Industry have been selected i.e. SUN Pharma Ltd. and Dr. Reddy's Laboratory Ltd. for analysis and interpretation of data.

Period of Study

This comparative study includes the time period of 5 financial years i.e. from 2015–'16 to 2019–'20.

Data Collection

For this evaluation, secondary data is to be preferred and this Secondary data has been taken from the following sources:

- Annual Reports of the sample companies which are to be taken for research paper for the financial years 2015– '16 to 2019–'20. These reports are published reports by those particular companies.
- Official websites of selected sample companies of pharmaceutical industry.
- www.moneycontrol.com

Hypothesis for this Study

Null Hypothesis

- The means of operating activities of the selected pharmaceutical companies are non – flexible and having no significant difference.
- The means of investing activities of the selected pharmaceutical companies are non – flexible and having no significant difference.
- The means of financing activities of the selected pharmaceutical companies are non – flexible and having no significant difference.

Alternate Hypothesis

- The means of operating activities of the selected pharmaceutical companies are flexible and having significant difference.
- The means of investing activities of the selected pharmaceutical companies are flexible and having significant difference.
- The means of financing activities of the selected pharmaceutical companies are flexible and having significant difference.

Statistical Tools and Techniques

- Mean
- Standard Deviation
- Co – efficient of Variation
- T – Test

Table Showing Statistical Analysis by Using Statistical Tools: - Mean, Standard Deviation and Co - Variance

Year	Operating Activities of Sun Pharma Ltd.	Operating Activities of Dr. Reddy's Lab. LTD.	Investing Activities of Sun Pharma Ltd.	Investing Activities of Dr. Reddy's Lab. Ltd.	Financing Activities of Sun Pharma Ltd.	Financing Activities of Dr. Reddy's Lab. Ltd.
2015-16	-1244.45	2798.20	3630.19	-1961.10	-2425.12	-693.70
2016-17	-1621.00	1015.90	2381.38	1442.50	-752.99	-2581.80
2017-18	-1171.23	1538.60	1391.62	-1179.90	-272.10	-304.40
2018-19	1242.18	2762.10	433.69	-550.90	-1468.59	-2223.10
2019-20	1305.85	1839.20	1479.29	-1689.20	-2871.15	-224.10
Total	-1488.65	9954	9316.17	-3938.6	-7789.95	-6027.1
Mean	-297.73	1990.80	1863.234	-787.72	-1557.99	-1205.42
Rank for Mean	2	1	1	2	2	1
S. D.	1445.087	778.571	1204.578	1357.687	1093.827	1114.3134
Rank for S. D.	2	1	1	2	1	2
Co – Variance	-485.368	39.1084	64.649	-172.357	-70.207	-92.442
Rank for Co - Variance	1	2	2	1	2	1

Findings

- Above table for statistical analysis shows that the arithmetic mean of net cash flow from operating activities of DR. REDDY'S LABORATORIES LTD. is more than that of SUN PHARMA LTD. in this period of study. Theoretically, the mean is lower, it has to be ranked lower than others. Here, Sun Pharma ltd. is on second position and DR. REDDY'S LABORATORY LTD. is at first position in this given period of study.
- In case of net cash flow from investing activities, there has been reverse situation than net cash flow from operating activities. In this, SUN PHARMA is given first rank and DR. REDDY'S LABORATORIES LTD. is given second rank having negative value of mean. But SUN PHARMA's mean is in positive value.
- Net cash flow from financing activities is in same situation like operating activities of selected sample companies. SUN PHARMA LTD. is given first rank and the other company, DR. REDDY'S LABORATORIES LTD. is given second rank for this period of study.
- From the above table, standard deviation shows that value of S. D. is lower then it got higher rank and if the value is higher then it got lower rank. From this rule, for the first activity, DR. REDDY'S LABORATORY Ltd got higher position than SUN PHARMA LTD. while in case of net cash flow from investment's activities, S. D. of SUN PHARMA LTD. is lower which is given first rank and dr. reddy's laboratory ltd. is given second rank because of high standard deviation in the given time of study. In financing activities, situation was same as net cash flow from investing activities, in which sun pharma is given first position because of having lower S. D. than dr. reddy's laboratory ltd. which has been given second rank according to this rule of standard deviation.

- There is same rule for co – variance as the rule mentioned for S. D. that higher the value of co – variance, lower the rank will be given which is inverse relationship between them. Results of co – variance is exactly reverse than results of standard deviation in case of rank is to be given to them. In operating activities, Sun Pharma Ltd. is given first rank because of having lower value of co – variance than Dr. Reddy's laboratory ltd. which is given second position in this given period of a study. In matter of net cash flow from investing and financing activities, SUN PHARMA LTD. having higher value is given second rank while Dr. Reddy's laboratory having lower value is given first position according to the theoretical rule of this statistical tool.

Overall Conclusion

Performance of the Company	Operating Activities of Company	Investing Activities of Company	Financing Activities of Company
Optimum	Dr. Reddy's Laboratory	Sun Pharma Ltd.	Dr. Reddy's Laboratory
Poor	Sun Pharma Ltd.	Dr. Reddy's Laboratory	Sun Pharma Ltd.

Paired T – Test Between Two Means for Selected Sample Companies

T – Test: Paired two Sample for Means for Net Cash Flow from Operating Activities		
Particulars	Operating Activities of Sun Pharma Ltd.	Operating Activities of Dr. Reddy's Lab. Ltd.
Mean	-297.73	1990.8
Variance	2088279.031	606173.965
Observations	5	5
Pearson Correlation	0.414472738	
Hypothesized Mean Difference	0	
df	4	
t Stat	-3.85534268	
t Critical two-tail	2.776445105	

T – Test: Paired Two Sample for Means for Net Cash Flow from Investing Activities		
Particulars	Investing Activities of Sun Pharma Ltd.	Investing Activities of Dr. Reddy's Lab. Ltd.
Mean	1863.234	-787.72
Variance	1451009.398	1843314.232
Observations	5	5
Pearson Correlation	-0.110857039	
Hypothesized Mean Difference	0	
df	4	
t Stat	3.099768318	
t Critical two-tail	2.776445105	

T – Test: Paired Two Sample for Means for Net Cash Flow from Financing Activities		
Particulars	Financing Activities of Sun Pharma Ltd.	Financing Activities of Dr. Reddy's Lab. Ltd.
Mean	-1557.99	-1205.42
Variance	1196458.519	1241694.457
Observations	5	5
Pearson Correlation	-0.363598393	
Hypothesized Mean Difference	0	
df	4	
t Stat	-0.432381007	
t Critical two-tail	2.776445105	

Table for Results of Hypothesis Testing (Accepted or Rejected)

Activities of CFS	T - Crit	T - Stat	Hypothesis Accepted or Rejected
O. A.	2.7764	-3.855	Hypothesis Accepted
I. A.	2.7764	3.099	Hypothesis Rejected
F. A.	2.7764	0.4324	Hypothesis Accepted

Hypothesis Testing

T – Test Result of Net Cash Flow from Operating Activities

- The means of operating activities of the selected pharmaceutical companies are non – flexible and having no significant difference is found from t – test. Because the reason is that the statistical value of t (-3.855) is lower than critical value of t (2.7764).

T – Test Result of Net Cash Flow from Investing Activities

- The means of investing activities of the selected pharmaceutical companies are flexible and having significant difference is found from t – test. Because the reason is that the statistical value of t (3.099) is greater than critical value of t (2.7764).

T – Test Result of Net Cash Flow from Financing Activities

- The means of financing activities of the selected pharmaceutical companies are non – flexible and having no significant difference is found from t – test. Because the reason is that the statistical value of t (0.4324) is lower than critical value of t (2.7764).

Conclusion and Recommendation

For stakeholders, it becomes very crucial to know about cash management and cash position of the companies. They should give more information about cash flow statements and also important to conclude cash flow per share, ratios of the statement such as cash flow margin ratio, operating cash flow Ratio for liquidity, cash return on equity and many more in its ratio analysis for financial performance. We should provide importance to cash flow ratios exactly as other traditional financial ratios. Company should conclude the reason of changes in activities of cash flow statements. Sometimes it's give a positive result though it will have negative values.

Limitations of the Study

- This study is dependent on published financial statements which includes cash flow statements of the selected sample companies. All results are depended on this data and are reliable up to that level.
- It is difficult to use all the statistical and accounting tools and techniques for analysis as well as interpretation of data.
- Secondary data is taken for this study having its own limitations.
- There are only two companies to be taken for this study which is not became representative of entire pharmaceutical industry.
- In the year 2019 – 20, last three months are abnormal due to pandemic – corona virus (COVID - 19) in world.

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