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"A Study of Liquidity and Solvency parameters Merger & Acquisitions of Corporate sector in India"

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Abstract

The objective of this paper is to analyse the relationship between the pre and post merger and acquisition performance of corporate sector in India. Aggregate corporate sector data ranging from 2003 to 2013 were analysed for evidence of T-test between the pre-merger corporate sector performance and post-merger corporate sector performance in India. The results obtained from the descriptive analysis of the pre and post merger and acquisition periods shows that the India sector performance is significantly better after the merger than before the merger. Overall, the results show that there is significant difference in the performance of corporate sector in India the pre merger and post merger and acquisition periods.

Keywords: *Mergers & acquisitions, financial performance, liquidity and solvency ratio*

Introduction Mergers and acquisitions are the most popular form of corporate restructuring for expanding or increasing the size and volume of business. The corporate would today is witnessing a sudden surge in this form of corporate restructuring, sweeping across all the industries which has totally restructured the market place. It has been a prominent trend in the advanced capitalist countries since the late twentieth century. But only in recent times it becomes a regular phenomenon in developing countries. This trend is different from earlier scenario where in the mergers and acquisitions was looked upon as a threat and had evoked images of dark shadows and backdoor entries to the corporate world. However, it has assumed an international dimension due to global economic integration and dismantling of barriers to trade and investment. Mergers and acquisitions are not new in the Indian Economy.

Merger: - Merger refers to a situation when two or more existing combine together and form a new entity. Either a new company may be incorporated for this purpose or one existing company generally a bigger one survives and another existing company which is smaller is merged into it. A Merger may occur in two ways.

i) Merger through absorption,

ii) Merger through consolidation

Acquisition: - Acquisition refers to the acquiring of ownership right in the property and asset without any combination of companies. Thus in Acquisition two or more companies may remain independent and separate legal entity, but there may be change in control of companies.

Review of literature

- **Manoj Kumara, N.V. & Satyanarayana, (2013),** the study shows that the liquidity positions of the merger and acquisition has improved but it is not statistically insignificant.
- **Neha Verma, (2014),** this research paper aims to study the impact of mergers and acquisitions on the performance of Indian Telecom industry, by examining some pre and post-merger financial and operating variables.
- **Priyanka and Richa Verma, (2014),** this research paper is to analyze the market growth of ecommerce which attracts the merger and acquisition in India.

Statement of the Problem

In any research it becomes very important to know the problem area. Determining problem area helps in chalking out plans to conduct the research in appropriate manner. It is said that a problem which is well defined is half solved. The main problem area which the research is testing to related to the merger and acquisitions. In this the researcher wants to investigate whether merger and acquisition have pre and post Evaluation an impact on the world wide company in India.

Data Collection

This study is based on secondary data. The data is collect from published annual report of selected corporate sector in India in year 2003-04 to 2012-13.

Objectives of the Study

- To measure the impact of mergers and acquisitions on financial performance of Indian company.
- To examine liquidity and solvency parameters of the selected companies in India.
- To provide the valuable suggestions.

Period of the Study

The study period cover the period from year 2003-04 to year 2012-13. The parameter calculated for the last 10 years from 2003-04 to 2012-13.

Hypothesis of the Study

H_0: - There would be no significant difference between the current ratio of the pre and post merger and acquisition of selected companies in India.

H_0: - There would be no significant difference between the quick ratio of the pre and post merger and acquisition of selected companies in India.

H_0: - There would be no significant difference between the debt equity ratio of the pre and post merger and acquisition of selected companies in India.

H_0: - There would be no significant difference between the long term debt equity ratio of the pre and post merger and acquisition of selected companies in India.

Data Analysis and Interpretation

Liquidity Ratios

Liquidity ratios analyze the ability of a company to pay off both its current liabilities as they become due as well as their long-term liabilities as they become current. In other words, these ratios show the cash levels of a company and the ability to turn other assets into cash to pay off liabilities and other current obligations.

Liquidity is not only a measure of how much cash a business has. It is also a measure of how easy it will be for the company to raise enough cash or convert assets into cash. Assets like accounts receivable, trading securities, and inventory are relatively easy for many companies to convert into cash in the short term. Thus, all of these assets go into the liquidity calculation of a company. Here are the most common liquidity ratios.

Solvency Ratios

Solvency ratios, also called leverage ratios, measure a company's ability to sustain operations indefinitely by comparing debt levels with equity, assets, and earnings. In other words, solvency ratios identify going concern issues and a firm's ability to pay its bills in the long term. Many people confuse solvency ratios with liquidity ratios. Although they both measure the ability of a company to pay off its obligations, solvency ratios focus more on the long-term sustainability of a company instead of the current liability payments. Solvency ratios show a company's ability to make payments and pay off its long-term obligations to creditors, bondholders and banks. Better solvency ratios indicate a more creditworthy and financially sound company in the long-term. The most common solvency ratios include.

1. Current Ratio

This most widely used ratio shows the proportion of current assets to current liabilities. It is also known as working capital ratio as it is a measure of working capital available at a particular time. The ratio is obtained by dividing current assets by the current liabilities. It is a measure of short-term financial strength of the business and shows whether the business will be able to meet its current liabilities, as and when they mature. Remember that a liability which will mature within a period of 12 months is a current liability. They include creditors, bills payable, bank overdraft, outstanding expenses, provision for taxation etc. Similarly, current assets are in the form of cash or can be readily converted into cash within a short time. They include cash, bank balance, stock, debtors, bills receivable, prepaid expenses, and accrued income, readily marketable securities etc.

Table no. 1 Current Ratio

Sample Units	Pre - Merger & Acquisition						Post – Merger & Acquisition					
	2003 -04	2004 -05	2005 -06	2006 -07	2007 -08	Mean	2008 -09	2009 -10	2010 -11	2011 -12	2012 -13	Mean
Tata Steel	0.66	0.69	0.71	1.69	3.81	**1.51**	0.91	1.12	1.53	0.93	0.86	**1.07**
Hindalco Ind.	1.06	1.03	1.12	1.22	1.08	**1.10**	1.20	1.02	0.96	1.01	1.26	**1.09**
Videocon Ind.	0.74	3.17	2.43	1.76	2.82	**2.18**	3.94	5.01	3.97	1.19	0.59	**2.94**
Dr.Reddy's labs	2.73	2.23	1.29	2.56	1.82	**2.13**	1.85	1.49	1.66	1.70	1.62	**1.66**
Suzlon Energy	1.40	1.43	2.47	1.49	1.46	**1.65**	0.82	1.14	1.31	0.87	0.79	**0.99**
HPCL	0.89	0.89	0.91	0.82	1.03	**0.91**	0.93	0.74	0.77	0.66	0.68	**0.76**
Ranbaxy Labs	1.31	0.92	0.96	0.83	1.16	**1.04**	1.18	1.40	0.76	0.81	0.54	**0.94**
ONGC	1.73	1.40	1.42	1.40	1.56	**1.50**	1.45	1.39	1.17	1.13	2.37	**1.50**
Tata Motors Ltd	0.70	0.98	1.07	0.86	0.64	**0.85**	0.44	0.44	0.52	0.50	0.42	**0.46**
United Spirits	0.87	0.86	1.42	1.83	1.53	**1.30**	1.22	2.47	2.08	1.41	1.30	**1.70**
MEAN	**1.21**	**1.36**	**1.38**	**1.45**	**1.69**	**1.42**	**1.39**	**1.62**	**1.47**	**1.02**	**1.04**	**1.31**
SD	**0.64**	**0.78**	**0.61**	**0.55**	**0.95**	**0.47**	**0.97**	**1.31**	**1.00**	**0.35**	**0.60**	**0.69**
CV	**52.89**	**57.35**	**44.20**	**37.93**	**56.21**	**72.69**	**69.78**	**80.86**	**68.02**	**34.31**	**57.69**	**52.67**

(Source: Computed by Researcher)

Above Table No. 1 is indicating the current ratio of selected companies during the last five year for pre and post impact of merger & acquisition. Researcher has been tried to calculate current ratio of selected 10 corporate sector units for the period of 2003-04 to 2012-13. It is clearly shown from the table that highest mean of current ratio Videocon Ind. (2.18) and lowest Tata motors ltd (0.85) as compared to other sample units during the five year period and out of 10 units of pre merger & acquisition. Other side in post merger & acquisition, It is highest mean of found Videocon ind. (2.94) and lowest Tata motors ltd (0.46) as compared to other sample units during the five year period of post merger & acquisition. Beside this pre and post merger & acquisition the performance of high mean of 1.69 in year 2007-08 and low 1.02 in year 2011-12, as compared to other years of study period. It is noted that overall performance of current ratio is pre merger & acquisition (1.42) decline by 0.11 compared to post merger & acquisition and reached at (1.31) during the study period.

Fluctuating trend in standard deviation of current ratios in terms of companies all sample units. It has been observed standard deviation of the current ratio of pre-merger & acquisition (0.47) is also increased by 0.22 as compare to post–merger & acquisition during study period of all sample units. It is shown highest standard deviation in the year 2009-10, as it is evident by 1.31 as compared to other years of study period.

It is observed the data regarding current ratios of coefficient variation high 80.86 in year 2009-10 and low 34.31 in years 2011-12 in 10 units during pre & post merger and acquisition. Post merger and acquisition Videocon Ind. and united spirits have been increased by 0.76 and 0.40. however almost all sample units except Videocon Ind. and united spirits show decline growth rate of current ratios post merger and acquisition. So, the researcher can conclude that post merger and acquisitions the financial performance of sample units was not improved.

Hypothesis Testing:

For the testing of hypothesis researcher has applied T-Test.

- **H_0: -** There is no significant difference in the current ratio of the pre and post merger and acquisition of selected companies in India.
- **H_1: -** There is significant difference in the current ratio of the pre and post merger and acquisition of selected companies in India.

Table No. 2 T- Test for Current Ratio of sampled companies

Period	**No**	**Mean**	**SD**	**T-Cal.**	**T- Tab.**
Pre – Merger & Acquisition	5	1.42	0.47	0.451	2.262
Post - Merger & Acquisition	5	1.31	0.69		

(Source: Calculated by Researcher)

The table value of "T-Test" at 5% level of significance at 9 degree of freedom is 2.262.
Where:
$T_{cal.}$ 0.451 < $T_{Tab.}$ 2.262
H_0 is accepted

Conclusion:

The calculated value of "T-Test" is 0.451 the table value of "T-Test "at 5% significant level of satisfaction (where degree freedom is 9) is 2.262. Hence, null hypothesis is accepted. It shows that means there is no significant difference the current ratio of the pre and post merger and acquisition of selected companies in India.

2. Quick Ratio

A variant of current ratio is the quick ratio or liquid ratio which is designed to show the amount of cash available to meet immediate payments. It is obtained by dividing the quick assets by quick liabilities. Quick assets are obtained by dedicating stock-in-trade from current assets. Stock is not treated as quick assets because it cannot be readily converted into cash as and when required. The current of a business does not reflect the true quick position, if its current assets consist largely of stock-in-trade. The quick liabilities are obtained by deducting bank overdraft from current liabilities. Bank overdraft is not included in quick liabilities because bank overdraft is not likely to be called on demand and is treated as a sort of permanent mode of financing. Hence, it is not treated as a quick liability.

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Quick Liabilites}}$$

Table no. 3 Quick Ratio

Sample Units	Pre - Merger & Acquisition						Post – Merger & Acquisition					
	2003-04	2004-05	2005-06	2006-07	2007-08	Mean	2008-09	2009-10	2010-11	2011-12	2012-13	Mean
Tata Steel	0.39	0.33	0.30	1.37	3.52	**1.18**	0.57	0.76	1.31	0.69	0.61	**0.79**
Hindalco Ind.	0.83	0.58	0.73	0.66	0.53	**0.67**	0.88	0.39	0.34	0.55	0.91	**0.61**
Videocon Ind.	0.50	4.03	2.81	2.15	4.14	**2.73**	4.62	6.19	5.53	3.15	1.58	**4.21**
Dr.Reddy's labs	2.57	2.59	2.43	2.81	1.94	**2.47**	2.13	1.45	1.91	1.84	2.02	**1.87**
Suzlon Energy	1.57	1.59	2.05	2.40	2.12	**1.95**	2.19	2.00	1.91	1.07	0.93	**1.62**
HPCL	0.22	0.26	0.76	1.10	1.59	**0.79**	0.53	0.43	0.44	0.52	0.71	**0.53**
Ranbaxy Labs	0.92	0.98	1.03	0.97	0.86	**0.95**	0.89	1.60	0.84	0.95	0.68	**0.99**
ONGC	1.77	1.33	1.28	1.28	1.39	**1.41**	1.27	1.22	1.08	1.22	2.26	**1.41**
Tata Motors Ltd	0.70	0.98	1.07	0.86	0.64	**0.85**	0.58	0.44	0.54	0.43	0.40	**0.48**
United Spirits	1.52	1.38	2.28	3.26	2.97	**2.28**	2.69	5.61	4.39	2.81	2.69	**3.64**
MEAN	**1.10**	**1.41**	**1.47**	**1.69**	**1.97**	**1.53**	**1.64**	**2.01**	**1.83**	**1.32**	**1.28**	**1.62**
SD	**0.74**	**1.15**	**0.85**	**0.90**	**1.23**	**0.77**	**1.30**	**2.13**	**1.76**	**0.97**	**0.80**	**1.31**
CV	**67.27**	**81.56**	**57.82**	**53.25**	**62.44**	**50.33**	**79.27**	**163.84**	**96.17**	**73.48**	**60.61**	**80.86**

(Source: Computed by Researcher)

Above Table No. 3 is showing the quick ratio of selected companies during the last five year for pre and post impact of merger & acquisition. Researcher has been tried to calculate quick ratio of selected 10 corporate sector units for the period of 2003-04 to 2012-13. It is clearly shown from the table that highest mean of quick ratio Videocon Ind. (2.73) and lowest Hindalco Ind. (0.67) as compared to other sample units during the five year period and out of 10 Units of pre merger & acquisition. Other side in post merger & acquisition, it is highest mean of found Videocon Ind. (4.21) and lowest Tata Motors Ltd (0.48) as compared to other sample units during the five year period of post merger & acquisition. Beside this pre and post merger & acquisition the performance of high mean of 2.01 in year 2009-10 and low 1.10 in year 2003-04, as compared to other years of study period. It is noted that overall performance of quick ratio is pre merger & acquisition (1.53) increased by 0.9 compared to post merger & acquisition and reached at (1.62) during the study period.

Fluctuating trend in standard deviation of quick ratios in terms of companies all sample units. It has been observed standard deviation of the quick ratio of pre - merger & acquisition (0.77) is also increased by 0.54 as compare to post–merger & acquisition during study period of all sample units. It is shown highest standard deviation in the year 2009-10, as it is evident by 2.13 as compared to other years of study period.

It is observed the data regarding quick ratios of coefficient variation high 163.84 in year 2009-10 and low 53.25 in years 2006-07 in 10 units during pre & post merger and acquisition. Post merger and acquisition Videocon Ind. Ranbaxy labs and united spirits have been increased by 1.48, 0.40, and 1.36. However almost all sample units except Videocon ind. Ranbaxy labs and united spirits show decline growth rate of quick ratios post merger and acquisition. So, the researcher can conclude that post merger and acquisitions the financial performance of sample units was not improved.

Hypothesis Testing:

For the testing of hypothesis researcher has applied T-Test.

- **H_0: -** There is no significant difference in the quick ratio of the pre and post merger and acquisition of selected companies in India.
- **H_1: -** There is significant difference in the quick ratio of the pre and post merger and acquisition of selected companies in India.

Table No. 4 T- Test for Quick ratio of sampled companies

Period	No	Mean	SD	T-Cal.	T- Tab.
Pre – Merger & Acquisition	5	1.53	0.77		
Post - Merger & Acquisition	5	1.62	1.31	0.712	2.262

(Source: Calculated by Researcher)

The table value of "T -Test" at 5% level of significance at 9 degree of freedom is 2.262.

Where:

$T_{cal.}$ 0.712 < $T_{Tab.}$ 2.262

H_0 is accepted

Conclusion:

The calculated value of "T-Test" is 0.712 the table value of "T-Test "at 5% significant level of satisfaction (where degree freedom is 9) is 2.262. Hence, null hypothesis is accepted. It shows that means there is no significant difference the quick ratio of the pre and post merger and acquisition of selected companies in India.

3. Debt Equity Ratio

It is also otherwise known as external to internal equity ratio. It is calculated to know the relative claims of outsiders and the owners against the firm's assets. This ratio establishes the relationship between the outsider's funds and the shareholders fund. Thus,

$$\textbf{Debt} - \textbf{equity ratio} = \frac{\text{Outsiders}' \text{ funds}}{\text{Share holders}' \text{ funds}}$$

The two basic components of the ratio are outsiders' funds and shareholders' funds. The outsiders' funds include all debts/liabilities to outsiders i.e. debentures, long term loans from financial institutions, etc. Shareholders' funds mean preference share capital, equity share capital, reserves and surplus and fictitious assets like preliminary expenses. This ratio indicates the proportion between shareholders' funds and the long-term borrowed funds. In India, this ratio may be taken as acceptable if it is 2:1. If the debt-equity ratio is more than that, it shows a rather risky financial position from the long term point of view.

Table no. 5 Debt Equity Ratio

Sample Units	Pre - Merger & Acquisition						Post – Merger & Acquisition					
	2003-04	2004-05	2005-06	2006-07	2007-08	Mean	2008-09	2009-10	2010-11	2011-12	2012-13	Mean
Tata Steel	0.75	0.39	0.26	0.69	1.08	**0.63**	1.34	0.68	0.56	0.45	0.47	**0.70**
Hindalco Ind.	0.37	0.50	0.51	0.59	0.48	**0.49**	0.35	0.23	0.24	0.46	0.72	**0.40**
Videocon Ind.	-	0.90	1.23	0.95	1.19	**1.07**	1.28	1.26	1.88	1.45	0.72	**1.32**
Dr.Reddy's labs	0.03	0.13	0.41	0.08	0.10	**0.15**	0.12	0.10	0.24	0.23	0.20	**0.18**
Suzlon Energy	0.59	0.54	0.12	0.31	0.44	**0.40**	1.13	1.36	0.99	1.17	3.39	**1.61**
HPCL	0.22	0.26	0.76	1.10	1.59	**0.79**	2.12	1.84	1.99	2.09	2.36	**2.08**
Ranbaxy Labs	0.05	0.43	1.35	1.38	1.05	**0.85**	0.85	0.83	2.02	2.48	4.37	**2.11**
ONGC	0.28	0.21	0.24	0.24	0.18	**0.23**	0.20	0.19	-	0.04	-	**0.14**
Tata Motors Ltd	0.35	0.61	0.53	0.59	0.80	**0.58**	1.06	1.12	0.73	0.56	0.75	**0.84**
United Spirits	1.18	2.00	1.79	1.11	0.58	**1.33**	0.62	0.73	0.71	0.59	0.53	**0.64**
MEAN	**0.42**	**0.60**	**0.72**	**0.70**	**0.75**	**0.65**	**0.91**	**0.83**	**1.04**	**0.95**	**1.50**	**1.00**
SD	**0.37**	**0.54**	**0.56**	**0.42**	**0.48**	**0.37**	**0.61**	**0.57**	**0.73**	**0.82**	**1.50**	**0.74**
CV	**88.10**	**90.00**	**77.78**	**58.33**	**64.00**	**55.22**	**67.03**	**68.67**	**70.19**	**86.32**	**100.0**	**74.00**

(Source: Computed by Researcher)

Above Table No. 5 is explaining the debt equity ratio of selected companies during the last five year for pre and post impact of merger & acquisition. Researcher has been tried to calculate debt equity ratio of selected 10 corporate sector units for the period of 2003-04 to 2012-13. It is clearly shown from the table that highest mean of debt equity ratio united spirits (1.33) and lowest ONGC (0.23) as compared to other sample units during the five year period and out of 10 units of pre merger & acquisition. Other side in post merger & acquisition, it is highest mean of found Ranbaxy labs (2.11) and lowest ONGC (0.14) as compared to other sample units during the five year period of post merger & acquisition. beside this pre and post merger & acquisition the performance of high mean of 1.50 in year 2012-13 and low 0.42 in year 2003-04, as compared to other years of study period. It is noted that overall performance of debt equity ratio is pre merger & acquisition (0.65) increased by 0.35 compared to post merger & acquisition and reached at (1.00) during the study period.

Fluctuating trend in standard deviation of debt equity ratios in terms of companies all sample units. It has been observed standard deviation of the debt equity ratio of pre - merger & acquisition (0.37) is also increased by 0.37 as compare to post – merger & acquisition during study period of all sample units. It is shown highest standard deviation in the year 2012-13, as it is evident by 1.50 as compared to other years of study period.

It is observed the data regarding debt equity ratios of coefficient variation high 100.00 in year 2012-13 and low 58.33 in years 2006-07 in 10 units during pre & post merger and acquisition. post merger and acquisition Tata steel, Videocon Ind, Dr. Reddy's Labs, Suzlon Energy, Ranbaxy Labs, ONGC and Tata Motors ltd have been decreased by 0.07, 0.25, 0.03, 1.21, 1.29, 1.26 and 0.26. however almost all sample units except Tata Steel, Videocon Ind, Dr. Reddy's Labs, Suzlon Energy, Ranbaxy Labs, ONGC and Tata Motors Ltd show decline growth rate of debt equity ratios post merger and acquisition. So, the researcher can conclude that post merger and acquisitions the financial performance of sample units was not improved.

Hypothesis Testing:

For the testing of hypothesis researcher has applied T-Test.

- **H_0: -** There is no significant difference the debt equity ratio of the pre and post merger and acquisition of selected companies in India.
- **H_1: -** There is significant difference the debt equity ratio of the pre and post merger and acquisition of selected companies in India.

Table No. 6 T- Test for Debt Equity ratio of sampled companies

Period	No	Mean	SD	T-Cal.	T- Tab.
Pre – Merger & Acquisition	5	0.65	0.37	0.137	2.262
Post - Merger & Acquisition	5	1.00	0.74		

(Source: Calculated by Researcher)

The table value of "T -Test" at 5% level of significance at 9 degree of freedom is 2.262.

Where:

$T_{cal.}$ 0.137 < $T_{Tab.}$ 2.262

H_0 is accepted

Conclusion:

The calculated value of "T-Test" is 0.137 the table value of "T-Test "at 5% significant level of satisfaction (where degree freedom is 9) is 2.262. Hence, null hypothesis is accepted. It shows that means there is no significant difference the debt equity ratio of the pre and post merger and acquisition of selected companies in India.

4 Long Term Debt Equity Ratio

The Long-Term Debt-to-Equity Ratio is calculated by comparing the total debt of the company (which includes both the short and long-term obligations), and then divides the total amount with shareholder equity. This number can be found at the bottom of the balance sheet, and it's basically the difference that you can find between liabilities and assets. Simply put, this is the amount of money that remains for the stockholders once all the debt has been paid. Most of the time, a ratio of 1:1 is enough for most companies no matter their field of work, but the ratio can change depending the nature of the business.

$$\textbf{Long} - \textbf{term Debt to Equity Ratio} = \frac{\text{Long} - \text{term Debt}}{\text{Equity}}$$

Table no. 7 Long Term Debt Equity Ratio

Sample Units	Pre - Merger & Acquisition						Post – Merger & Acquisition					
	2003 -04	2004 -05	2005 -06	2006 -07	2007 -08	Mean	2008 -09	2009 -10	2010 -11	2011 -12	2012 -13	Mean
Tata Steel	0.72	0.37	0.25	0.68	1.07	**0.62**	1.31	0.68	0.56	0.45	0.47	**0.69**
Hindalco Ind.	0.31	0.45	0.31	0.52	0.37	**0.39**	0.25	0.19	0.17	0.35	0.61	**0.31**
Videocon Ind.	-	0.82	1.14	0.83	1.10	**0.97**	1.23	1.22	1.79	1.07	0.57	**1.18**
Dr.Reddy's labs	0.03	0.13	0.41	0.08	0.10	**0.15**	0.12	0.10	0.24	0.23	0.20	**0.18**
Suzlon Energy	0.30	0.27	0.07	0.04	0.29	**0.19**	0.53	1.02	0.81	0.82	2.71	**1.18**
HPCL	0.05	0.02	0.51	0.90	1.19	**0.53**	1.79	1.02	1.10	0.48	0.65	**1.01**
Ranbaxy Labs	-	0.07	0.93	0.90	0.80	**0.68**	0.68	0.57	0.49	1.02	1.80	**0.91**
ONGC	0.20	0.18	0.24	0.24	0.18	**0.21**	0.20	0.19	-	-	-	**0.20**
Tata Motors Ltd	0.32	0.59	0.42	0.31	0.50	**0.43**	0.49	0.80	0.48	0.41	0.42	**0.52**
United Spirits	0.54	1.38	1.40	0.86	0.32	**0.90**	0.30	0.51	0.44	0.24	0.16	**0.33**
MEAN	**0.31**	**0.43**	**0.57**	**0.54**	**0.59**	**0.51**	**0.69**	**0.63**	**0.68**	**0.56**	**0.84**	**0.65**
SD	**0.23**	**0.42**	**0.44**	**0.34**	**0.41**	**0.29**	**0.56**	**0.39**	**0.50**	**0.32**	**0.85**	**0.40**
CV	**74.19**	**97.67**	**77.19**	**62.96**	**69.49**	**56.86**	**81.16**	**61.90**	**73.52**	**57.14**	**101.19**	**61.54**

(Source: Computed by Researcher)

Above Table No. 7 is suggesting the long term debt equity ratio of selected companies during the last five year for pre and post impact of merger & acquisition. Researcher has been tried to calculate long term debt equity ratio of selected 10 corporate sector units for the period of 2003-04 to 2012-13. It is clearly shown from the table that highest mean of long term debt equity ratio Videocon Ind. (0.97) and lowest Dr. Reddy's Labs (0.15) as compared to other sample units during the five year period and out of 10 units of pre merger & acquisition. Other side in post merger & acquisition, It is highest mean of found Videocon Ind. (1.18) and Suzlon Energy (0.18) and lowest Dr. Reddy's Labs (0.18) as compared to other sample units during the five year period of post merger & acquisition. Beside this pre and post merger & acquisition the performance of high mean of 0.84 in year 2012-13 and low 0.31 in year 2003-04, as compared to other years of study period. It is noted that overall performance of long term debt equity ratio is pre merger & acquisition (0.51) increased by 0.14 compared to post merger & acquisition and reached at (0.65) during the study period.

Fluctuating trend in standard deviation of long term debt equity ratios in terms of companies all sample units. It has been observed standard deviation of the long term debt equity ratio of pre - merger & acquisition (0.29) is also increased by 0.11 as compare to post – merger & acquisition during study period of all sample units. It is shown highest standard deviation in the year 2012-13, as it is evident by 0.85 as compared to other years of study period.

It is observed the data regarding long term debt equity ratios of coefficient variation high 101.19 in year 2012-13 and low 57.14 in years 2011-12 in 10 units during pre & post merger and acquisition. Post merger and acquisition Tata Steel, Videocon Ind, Dr. Reddy's Labs, Suzlon Energy, HPCL, Ranbaxy Labs, and Tata Motors ltd have been increased by 0.07, 0.21, 0.03, 0.99, 0.48, 0.23 and 0.09. However almost all sample units except Tata Steel, Videocon Ind, Dr. Reddy's Labs, Suzlon Energy, HPCL, Ranbaxy Labs, and Tata Motors Ltd show decline growth rate of long term debt equity ratios post merger and acquisition. So, the researcher can conclude that post merger and acquisitions the financial performance of sample units was not improved.

Hypothesis Testing:

For the testing of hypothesis researcher has applied T-Test.

- **H_0: -** There is no significant difference in the long term debt equity ratio of the pre and post merger and acquisition of selected companies in India.

- **H_1: -** There is significant difference in the long term debt equity ratio of the pre and post merger and acquisition of selected companies in India.

Table No. 8 T- Test for Long Term Debt Equity ratio of sampled companies

Period	No	Mean	SD	T-Cal.	T- Tab.
Pre – Merger & Acquisition	5	0.51	0.29	0.285	2.262
Post - Merger & Acquisition	5	0.65	0.40		

(Source: Calculated by Researcher)

The table value of "T -Test" at 5% level of significance at 9 degree of freedom is 2.262.

Where:

$T_{cal.}$ 0.285 < $T_{Tab.}$ 2.262

H_0 is accepted

Conclusion:

The Calculated Value of "T-Test" is 0.285 the table value of "T-Test "at 5% significant level of satisfaction (where degree freedom is 9) is 2.262. Hence, null hypothesis is accepted. It shows that means there is no significant difference the long term debt equity ratio of the pre and post merger and acquisition of selected companies in India.

Suggestion of the study

- Current ratio shows company's ability to repay their short – term liability from sort – term assets. Table no. 1 shows that all sampled companies generate positive current ratio. It shows that all company's working capital is adequate to repay their current liabilities. Companies will try to maintain this position over a period of time.

- Quick ratio shows company's suddenly payment ability of the current liability. So far as concern to quick ratio all sampled companies has been able to pay their quick liability from quick assets during the study period. All companies generate positive ratio during the study period. Companies should try to maintain this position over a period of time.

- Debt–equity ratio shows proportion of borrowed and equity fund in capital structure. So far as concern to debt–equity ratio HPCL Ltd., Ranbaxy Ltd. having ideal capital mix during the study period. ONGC Ltd., Dr. Ready Ltd. are the riskier security among sampled companies. These companies should minimize their borrowing capital as they may not pay their borrowing capital from their owner's capital.

- Long term debt to equity ratio shows relationship between long term debt and equity shareholder's fund. Videocon Ltd., and Suzlon Ltd. having high ratio. It shows that company's long term debt is very high as compare to equity fund. Company fully enjoys debt capital but in the time of low demand interest can be burden of the company. So that company should try to minimize this over a period of time.

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