Pre & Post Merger Financial Performance - A Study of Selected Companies In Indian Pharmaceutical Sector

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Abstract - The main purpose of this study is to analyzing the financial performance and wealth maximization of acquiring companies and evaluates their financial and operating performance pre and post period of the merger. To conduct a constant research and arrive at an actual conclusion, we focus our research to only Indian Pharmaceutical companies. The idea of this article is to explore various views of Merger and Acquisitions related to the Indian Pharmaceutical sector in particular. To explain the impact of M&A on the companies of Sun Pharmaceuticals and Ranbaxy Laboratories Torrent Pharma and Elder Pharma has been taken into account as a case study of my study. With the help of profitability and solvency ratios like ROTA, ROCE, Net Profit Margin, and Debt-Equity Ratio, ROE, Gross Profit Margin It focus the financial condition of the concern during the pre and post merger period .This study also evaluates the independent Paired t-test by the help of SPSS for testing the statistical reliability of the firms and this test is used both for the ratio analysis and to understand the impact of Merger and Acquisitions. All these results are mainly based on the data collected from the company’s financial statements.

Keywords - Impact of M&A in Indian Pharmaceutical sector, Analyses and effects of merger in Indian Pharmaceutical sector.

INTRODUCTION

Currently India is the third largest in the world pharmaceutical market. M&A is one of the major aspects in present corporate industry. With the objective of maximizing shareholder value and profit maximization, companies keep analyzing different opportunities with the route of merger or acquisition. Internal Expansion can take place with the introduction of new techniques, setting new ideas related to products and services and increasing the overall efficiency and effectiveness of the organization. Through this internal expansion takes place at a gradually but in competitive era a completely new shape of external expansion has been taken into existence which takes place in the way of takeovers and amalgamations, mergers, acquisitions. Now a day business world, these procedures are apply many fields of industries which including FMCG products, telecommunications and information technology pharmaceuticals, hospitality, and many more.

In this context we provide an overview of the basic comparison between the finely varying terms like merger, amalgamation, acquisitions and joint ventures. Also we give a brief idea of the laws associated with the areas of M&A activities. We glance at the recent prominent mergers in the country followed by a case study on the horizontal merger between the Sun Pharmaceuticals and Ranbaxy Laboratories and Torrent Pharma and Elder Pharma in the year 2014 showing the impacts of merger and acquisition.

REVIEW OF LITERATURE

- Lubatkin [2009] analyzed the results of study that directly or indirectly indicate to the question whether mergers give benefits to the
acquiring firms and came up with the result that the acquiring firms have a chance of being benefited due to diversified operations monetary and technical activities.

- **A.T. Kearney [2010]** states that when a pharmaceutical company functioning at a large level mutually with other pharmaceutical company, it conclude that in a consumer benefit with an expanded product.

- **VidhishVyasetal (2012)** in this article made an attempt to study the more variables of mergers and acquisitions in Indian pharmaceutical industry. They suggested that one form of gaining efficiency in M&A is the combined effect of organizational management if the managers of the acquiring company possess superior managerial capabilities.

From the above study, it is conclude that here there is no conclusive proof about the basic impact of M&A on the firm's operating and financial activities. This research is focus to determine the impact of M&A on the post-merger performance and provide the implication on value of the organization.

**RELEVANCE OF THE STUDY:** This study will carry on knowing the effects of merger and amalgamation in shareholder value and profit of the pharmaceutical sectors. The main purpose of the study what is the main impact of mergers and acquisitions on the operating and financial performance based activities and shareholder wealth of the both firms.

**OBJECTIVE OF THE STUDY:**

The two main aims of this study are mentioned below-

1. To measure the impact of mergers and acquisitions on the operating and financial performance of the firm.
2. To analyze the effect of pre and post merger and acquisition on shareholder’s value in pharmaceutical sectors.

**RESEARCH HYPOTHESIS:**

- **H_0:** Merger and Acquisition have no impact on operating performance.
- **H_1:** Merger and Acquisition have positive impact on operating performances.
- **H_0:** Merger and Acquisition have no impact on shareholder’s wealth.
- **H_1:** Merger and Acquisition have positive impact on shareholder’s wealth.

**METHODOLOGY:**

Data are collected from various sources for this study.

- The required data are taken through published financial and annual reports of the selected Company website.
- For the purpose of study we taken 7 years data, 3 years for pre-merger period and 3 years for post-merger period.2014 is taken as base year as it the year of merger.
- The various financial techniques such as ratio analysis, trend analysis is being used. The profiles of both acquiring and acquired firms at the time of merger/acquisition have been collected from annual reports, newspaper clippings, websites etc.

<table>
<thead>
<tr>
<th>S. N.</th>
<th>Bidder firm</th>
<th>Target firm</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merger 1</td>
<td>Sun pharmaceutical Ltd.</td>
<td>Ranbaxy pharmaceutical Ltd.</td>
<td>2014</td>
</tr>
<tr>
<td>Merger 2</td>
<td>Torrent pharmaceutical Ltd.</td>
<td>Elder pharmaceutical Ltd.</td>
<td>2014</td>
</tr>
</tbody>
</table>

**ANALYSIS AND INTERPRETATION:**

For my research study I have taken Return on capital employed, Gross Profit Margin, Total debt-equity ratios Operating Profit Margin, Net profit margin, for evaluate the Operating performance of company and Earning per share, Return on net worth and Earning Retention Ratio for evaluate the Shareholder’s Wealth of the company.
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### Table 1: Analysis of financial ratios of Sun Pharma for Operating Performance

<table>
<thead>
<tr>
<th>Sun Pharma</th>
<th>Mean</th>
<th>S.D</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Profit Margin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>31.00</td>
<td>17.25</td>
<td>0.105</td>
<td>0.9</td>
</tr>
<tr>
<td>Post</td>
<td>29.84</td>
<td>2.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Profit Margin</td>
<td></td>
<td></td>
<td>-7.937</td>
<td>0.016</td>
</tr>
<tr>
<td>Pre</td>
<td>25.83</td>
<td>2.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post</td>
<td>46.57</td>
<td>2.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Profit Margin</td>
<td></td>
<td></td>
<td>1.277</td>
<td>0.33</td>
</tr>
<tr>
<td>Pre</td>
<td>31.00</td>
<td>17.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post</td>
<td>18.24</td>
<td>3.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on Capital employed</td>
<td></td>
<td></td>
<td>1.359</td>
<td>0.30</td>
</tr>
<tr>
<td>Pre</td>
<td>23.60</td>
<td>3.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post</td>
<td>20.55</td>
<td>1.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt-equity Ratio</td>
<td></td>
<td></td>
<td>-16.059</td>
<td>0.004</td>
</tr>
<tr>
<td>Pre</td>
<td>0.023</td>
<td>0.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post</td>
<td>0.256</td>
<td>0.04</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Compilation from financial state of data retrieves Moneycontrol.com by SPSS)

**For my study, I have used Paired ‘t’ test for data analysis with the help of SPSS Packages.**

It will show that the mean value of the operating profit margin is decreased from 31% to 29.84% post merger period with t-value 0.105 which is statistically significant at 0.05% significance level as the critical p-value is 0.9 which is above 0.05, so it is insignificant. Same as the mean value of net profit margin and ROCE has significantly decreased from 31% to 18.24% and 23.60% to 20.55% during post merger period as compared to pre-merger period with t-value of 1.277,1.359 respectively and p-value of 0.30 and 0.33 which is above 0.05%, so it is insignificant. The decrease in all these three ratios signifies that the operating performance has significantly gone down in post-merger. Consequently H0 (Null Hypotheses) is accepted which shows that there are no significant differences between pre and post-merger operating performance in terms of operating profit margin, net profit margin and ROCE of Sun Pharma. On the other hand, the mean value of Gross profit margin and Debt-Equity Ratios has significantly increased to 25.83% to 46.57% and 0.02% to 0.25% during post merger period as compared to pre-merger period with t-value of -7.937 and -16.059 respectively and in the other hand p value of 0.016 and 0.004 which is less than 0.05%, so it is significant. So, H0 (null hypotheses) is rejected leading to the acceptance of H1 (alternate hypotheses). So it will show that no significant impact between pre and post-merger period. In the above analysis shows that after merger the Operating Performance will go down in three ratios but on the other hand Debt-Equity ratio and gross profit ratio will increase which shows that the of Ranbaxy is have a mixed impact on Sun pharma with regard to operating performance of the bidder firm.

To evaluate the financial difference we can use financial ratios before and after merger, paired t-test use with the help of SPSS.

The above analysis would show in table 1. The Net profit margin, Operating profit margin, ROCE ratio the p-value is more than 0.05 percent, it can be find that there is no significant difference in these ratios before and after merger. For Gross Profit Margin and Debt-Equity Ratios the p value was less than 0.05 percent so it can be ascertained that there is a difference before and after merger. So the Operating Performance will go down during pre and post-merger period but the debt-Equity will more stronger in after merger period.

### Table 2: Analysis of financial ratios of Sun Pharm. for Shareholder’s wealth

<table>
<thead>
<tr>
<th>Sun Pharma</th>
<th>Mean</th>
<th>S.D</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Net worth</td>
<td>Pre</td>
<td>23.50</td>
<td>2.36</td>
<td>3.413</td>
</tr>
<tr>
<td>Post</td>
<td>16.84</td>
<td>2.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earnings Per Share(EPS)</td>
<td>Pre</td>
<td>53.53</td>
<td>11.87</td>
<td>-4.464</td>
</tr>
<tr>
<td>Post</td>
<td>89.14</td>
<td>6.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earning Retention Ratio</td>
<td>Pre</td>
<td>39.47</td>
<td>4.89</td>
<td>-24.085</td>
</tr>
<tr>
<td>Post</td>
<td>89.15</td>
<td>6.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Compilation from financial state of data retrieves Moneycontrol.com by SPSS)

Shareholder’s wealth of pre and post-merger period will evaluated on the basis of key ratios. Here
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Return on Net worth, Earnings Per Share (EPS), Earning Retention Ratio are indicates Performance Indicators.

For my study, I have used Paired ‘t’ test for data analysis with the help of SPSS Packages.

It would be evaluated that the mean value of the Return on net worth margin has decreased from 32.45% to 28.77% and post merger with t-value 3.10 and 0.424 which is statistically significant at 0.05% significance level as the critical p-value is 0.090 and 0.713 which is above 0.05, so it is insignificant. On the other hand, the mean value of Gross profit margin, Net profit margin and Debt-Equity ratio has significantly increased to 22.56% to 27.46%, 4.13% to 8.91% respectively. The increasing trends of all these three ratios shows that the operating performance has significantly gone up in post-merger. Consequently H0 is accepted which evaluates us to ascertain that there are no significant differences between pre and post-merger operating performance in terms of Gross profit margin, Net profit margin, Debt-Equity Ratios of Tarrent Pharma. In the above analysis shows that after merger the Operating Performance will go up which will have a favorable effect to the Tarrent Pharma the bidder firm.

Table No-4:- Analysis of financial ratios of Torrent Pharma for Shareholder’s wealth

<table>
<thead>
<tr>
<th>Torrent Pharma</th>
<th>Mean</th>
<th>S.D</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Net worth</td>
<td>Pre</td>
<td>30.93</td>
<td>4.38</td>
<td>-0.046</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>31.47</td>
<td>18.06</td>
<td></td>
</tr>
<tr>
<td>Earnings Per Share (EPS)</td>
<td>Pre</td>
<td>28.03</td>
<td>13.19</td>
<td>-7.181</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>226.07</td>
<td>58.21</td>
<td></td>
</tr>
<tr>
<td>Earning Retention Ratio</td>
<td>Pre</td>
<td>13.85</td>
<td>2.19</td>
<td>-12.278</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>66.70</td>
<td>3.90</td>
<td></td>
</tr>
</tbody>
</table>

The Shareholder’s wealth will evaluated on the basis of key ratios. Here Earning Retention Ratio, Return on Net worth, Earnings Per Share (EPS) are indicates Performance Indicators.

For my study, I have used Paired ‘t’ test for data analysis with the help of SPSS Packages.

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It would be shown that the mean value of the Return on net worth ratios has increased from 30.93% to 31.47% post merger with t-value -0.406 which is statistically insignificant at 0.05% significance level as the critical p-value is 0.967 which is above 0.05, so it is insignificant. The mean value of EPS has significantly increased from 28.03% to 226.07% during post merger period as compared to pre-merger period with t-value of -7.181 and P value of 0.019. The increase in all these two ratios signifies that the shareholder’s wealth has significantly gone improve in post-merger. Consequently H1 is accepted which will evaluates that there are significant differences between pre and post-merger shareholder’s wealth in forms of Return on net worth margin, EPS ratios of IOCL and H0 is accepted in Return on Net worth.

To evaluate the financial difference in the financial ratios before and after merger, paired t-test is use with the help of SPSS.

This analysis presented in table 4. The return on net worth is more than 0.0 5 percent, it can be concluded that there is no significant difference in these ratios before and after merger. For Earning Retention Ratio, Earnings Per Share (EPS) the p-value was less than 0.05 percent so it can be concluded that there is a significant difference before and after merger. So the shareholder wealth will go up during pre and post-merger period of Tarrent Pharma.

CONCLUSION

In this study, I am taken 7 year data of pre and post-merger period of two pharmaceutical sectors were examined by using Paired 't’ test techniques with the help of SPSS in the scope of the study is limited to time period for 2011 to 2017 and 2014 is taken base year. As a result of analyses made, before merger the operating performance of Sun Pharma is good but after merger is go up and the shareholder’s wealth is also go up after merger period. On the other hand, before merger the operating performance of Tarrent Pharma is good but after merger is go up and the shareholder’s wealth is improved after merger period.

REFERENCES


