SYNERGIES EVALUATION- A CASE STUDY OF NICHOLAS PIRAMAL LIMITED TAKEOVER ROCHE PRODUCTS LIMITED

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Abstract- Merger and Acquisition refers to the consolidation of companies or assets to get the competitive edge over the competitors that contribute for the survival of the fittest. This paper is an attempt to compare the synergetic performance of the firm in post acquisition. The data for a period of five years (2013-2017) is considered as sample size for the analysis. The study is a descriptive research, methodology adopted for the study to solve the problems are the descriptive statistics, probability sampling design, financial ratios and statistical tools. The company's Return on Assets value 0.00 and Return on Capital Employed value 0.03 which is less than 0.05 level of significance, hence the H₀ is rejected and it can be concluded that there is significant difference in the synergetic performance of acquiring company after acquisition. Therefore the Merger and Acquisition acts a boosting tool for synergetic performance of the acquiring company.

Index Terms- Merger and Acquisitions, Ratios, Synergies

I. INTRODUCTION

Merger and Acquisitions (M&A) is a general term that refers to the consolidation of companies or assets. M&A can include a number of different transactions, such as mergers, acquisitions, consolidations, tender offers, purchase of assets and management acquisitions. In all cases, two companies are involved. The term M&A also refers to the department at financial institutions that deals with mergers and acquisitions.

If you are familiar with Darwin’s theory ‘the survival of the fittest’, then comprehending M&A is not so difficult. Today, we live in an environment where the mergers and acquisitions have become a key part of the financial world. It is a legal obligation that one can witness due diligence during a possible merger or acquisition, but most probably it will be in the case of a buyer who is much concerned about his target. From a valid outlook, a deeply defined word, the merger is a legal fortification of two respective organizational bodies into one. Under the unified ownership, issues concerning both the companies are addressed with equal significance.

Sometimes inevitable, acquisition, the takeover syndrome is the darker face, where the ownership of one organization is taken over by the other through a legal binding. Stock, equity interests, everything will be consolidated and in either of the cases, the objective will be wealth maximization. Whether it is a merger or an acquisition, most of the time the deal ends on a sour note, if it’s a hostile takeover. But what is the purpose? It cannot be a mere fact of maximizing the revenue unless there is some long-term perception. If we go deep down to the legal dictionary, companies crave for this to go beyond their geographical reach. A greater chance of entering a new market or diversifying the product line is a definite thing. Business in the global marketplace, wow! Surely, it is a contemplation that can be easily achieved once the process is successful.

II. BACKGROUND OF THE CASE

The Piramal Group is a diversified global business conglomerate, which has presence across various sectors such as healthcare, life sciences, drug discovery, healthcare information management, specialty glass packaging, financial
services and real estate. Ajay Piramal is the chairman of the Piramal Group.

The Piramal Group comprises 4 key companies: Piramal Enterprises Ltd, Piramal Glass, Piramal Realty and Piramal Foundation.

F. Hoffmann-La Roche AG is a Swiss multinational healthcare company that operates worldwide under two divisions: Pharmaceuticals and Diagnostics. Its holding company, Roche Holding AG, has bearer shares listed on the SIX Swiss Exchange. The company headquarters are located in Basel. The company controls the American biotechnology company Genentech, which is a wholly owned affiliate, and the Japanese biotechnology company Chugai Pharmaceuticals, as well as the United States-based Ventana. Roche's revenues during fiscal year 2016 were 50.58 billion Swiss francs, or approximately US$50 billion. Roche is the third-largest pharma company worldwide. Descendants of the founding Hoffmann and Oeri families own slightly over half of the bearer shares with voting rights (a pool of family shareholders 45%, and Maja Oeri a further 5% apart), with Swiss pharma firm Novartis owning a further third of its shares. Roche is one of the few companies increasing their dividend every year, for 2016 as the 30th consecutive year. F. Hoffmann-La Roche is a full member of the European Federation of Pharmaceutical Industries and Associations (EFPIA).

Strategies Behind Mergers and Acquisition

Nicholas Piramal Limited:
- Profitability
- Realizable synergies in the operations of the target company
- Products should be complementary
- Management wanted to increase its presence in bulk drugs
- Planning to enter the over the counter drug and skin care market

Roche Products Limited:
- Improve profitability
- Expansion and improvement of distribution facilities
- Increasing the capacity of bulk drug plant
- Enhancing the productivity levels of its work force.
- Introduction of new products

III. LITERATURE REVIEW:

In the 21st century corporate world, mergers and acquisitions has always been one of the very important strategic tool used to achieve specific business objectives (Sudarsanam, 2003). Merger and acquisitions happens when two legal entities' assets and liabilities are combined to become one legal entity (Frantlikh, 2003). The trick and consideration is, acquisition usually carries a negative perception and could possibly be demoralizing the morale in company being acquired, hence damaging future synergies expected post M&A (Kotter and Schlesinger, 2005). For this thesis purposes, in order to better outline the research scopes and study framework, the specific definition of M&A adopted will be as followed:

European Central Bank, 2000, Gaughan, 2002, Jagersma, 2005, Awasi Mohamad and Vijay Baskar, 2009). Acquisition is the purchase of shares or assets on another company to achieve a managerial influence (European Central Bank, 2000, Chunlai Chen and Findlay, 2003, Awasi Mohamad and Vijay Baskar, 2009), not necessary by mutual agreement (Jagersma, 2005, Awasi Mohamad and Vijay Baskar, 2009). Ingh and Kumar's (1994) tax implications were singularly the most inviting feature for healthy company to merge with sick company. Ravi Sanker and Rao K.V (1998) They observed that a sick company is takeoverby a good management and makes serious attempts; it is possible tot turnaround successfully.

Anup Agraval Jeffrey F. Jaffe (1999) market initially overvalues acquirers if the acquisition increases EPS, ultimately leading to long-run under-performance. Canagavally R. (2000) The dissertation also investigates the share prices of sample companies in response to the announcement of merger. Beena P.L (2000) The paper establishes that acceleration of the merger movement in the early 1990s was accompanied by the dominance of merger between firms belonging to the same business group of houses with similar product line. Saple V. (2000) acquirers were high growth firms which had improved the performance over the years prior to the merger and had a higher liquidity.
The study of a sample of firms, restructured through mergers, showed that the merging firms were at the lower end in terms of growth, tax and liquidity of the industry. Huzifa Husain (2001) proper checks and balances have to be put in place to ensure that takeover facilitation improves overall efficiency of the company. Chitranandi A.K., (2001) found the success of merger and acquisitions depends on proper integration of employees, organization culture, IT, products, operations and service of both the companies. Mansur A. Mulla (2003) financial health was never in the healthy zone during the entire study period and ratio analysis highlighted that managerial incompetence accounted for most of the problems. 

Joydeep Biswas (2004) this paper it is argued that the Greenfiled FDI and cross-border M&As are not alternatives in developing countries like India. Vijay Shrimali and Karunesh Saxena’s (2004) an attempt has been made in the paper to provide a theoretical framework of M&A, various examples of merger and acquisition in the world market and finally, the economic advantage of M&A have been outlined.

Vanitha. S (2007) merged company reacted positively to the merger announcement and also, few financial variables only influenced the share price of the merged companies. Vanitha. S and Selvam. M (2007) found that the overall financial performance of merged companies irrespective of 13 variables were not significantly different from the expectations. Pramod Mantravadi and Vidyadhar Reddy, (2007) suggests that there are minor variations in terms of impact on operating performance following merger from different intervals of time in India. Ryo Kawahara and Fumiko Takeda, (2007) overall effects of M&A on corporate performance are statistically insignificant compared to the corporate performance of other companies within the same industry with similar pre-merger performance. David C. Cheng, (2009) the purchase price is a negative function of the target’s capital to asset ratio. The only variable used in their model is the ratio of acquirer to target assets.

Kumar (2009) found that the post-merger profitability, assets turnover and solvency of the acquiring companies, on average, show no improvement when compared with pre-merger values. N. M. Leepsa & Chandra Sekhar Mishra (2009) the present study is an attempt to find out the difference in post-merger performance compared with pre-merger in terms of profitability, liquidity and solvency. The statistical tools used are descriptive statistics, paired sample t-test. Dr. Salma Ahmed & Yasser Mahfooz (2009) analyze the rationale for consolidation in the Indian airline industry. The paper also evaluates major changes in the business environment affecting the airline industry.

IV. OBJECTIVE OF THE STUDY:

To compare the synergetic performance of the firm in post acquisition.

V. RESEARCH METHODOLOGY:

The research methodology is a process to solve the research problems systematically through the collection of data, sampling design, financial tools, and statistical tools used to evaluation of Merger and Acquisition.

5.1 Type of Research: Descriptive Research

- It is used to answer the research questions that describe who, what, where, when and how. It is undertaken to describe the synergies of merger and acquisition through financial data of the company and the merging process followed by the company.

5.2 Sampling Design: It is the process followed to select the sample out of the population. The design adopted for the study is probability sampling design that involves the sample size of 5 years data from the year 2013-14 to 2016-17.

<table>
<thead>
<tr>
<th>Acquirer</th>
<th>Nicholas Piramal Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquire</td>
<td>Roche Products Limited</td>
</tr>
<tr>
<td>Type of activity</td>
<td>Takeover</td>
</tr>
<tr>
<td>Motives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Profitability</td>
</tr>
<tr>
<td></td>
<td>• Realizable synergies in the operations of the target company</td>
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<td></td>
<td>• Products should be complementary</td>
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<td></td>
<td>• Management wanted to increase its presence in bulk drugs</td>
</tr>
<tr>
<td></td>
<td>• Planning to enter the over the counter drug and skin care market</td>
</tr>
</tbody>
</table>
5.3 Source of Data:
Data is very important source for the study. It is the process of gathering and measuring the information with respect to the topic. Secondary Data: Secondary data is the second hand information already available in websites, journals, articles, literatures, newspaper etc.

5.4 Tools used for Study:
The following are the tools used in the study for analysis of Merger and Acquisition:

a) Statistical Tools :
   a. Descriptive statistics: The study using of the statistical tools for to identifying the companies mean, standard Deviation and the covariance of the study.

b. T Test: It is the statistical hypothesis test in which the test statistic follows a student’s t-distribution under the null hypothesis.

b) Financial Tools:
   ❖ Ratios: In this study financial ratio are used for analysis of the companies based on the financial statements of both the company’s.

5.5 Hypothesis:
• $H_0$: There is no significant difference in the synergetic performance of acquiring company in post acquisition. (Nicholas Perimal Limited)

VI. ANALYSIS AND INTERPRETATION

Table-6.1 Key Financial Ratios of Piramal Enterprises

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Mar '17</th>
<th>Mar '16</th>
<th>Mar '15</th>
<th>Mar '14</th>
<th>Mar '13</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROFITABILITY RATIOS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Profit Margin (%)</td>
<td>46.23</td>
<td>39.47</td>
<td>14.81</td>
<td>-0.66</td>
<td>-14.53</td>
</tr>
<tr>
<td>Net Profit Margin (%)</td>
<td>20.62</td>
<td>30.17</td>
<td>15.52</td>
<td>-20.07</td>
<td>-16.50</td>
</tr>
<tr>
<td>Return on Capital Employed (%)</td>
<td>9.45</td>
<td>7.37</td>
<td>4.29</td>
<td>2.84</td>
<td>1.14</td>
</tr>
<tr>
<td>Return on Net Worth (%)</td>
<td>5.38</td>
<td>8.71</td>
<td>3.25</td>
<td>-4.05</td>
<td>-2.19</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>835.79</td>
<td>705.63</td>
<td>663.34</td>
<td>528.91</td>
<td>611.71</td>
</tr>
<tr>
<td>LIQUIDITY AND SOLVENCY RATIOS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Ratio</td>
<td>0.77</td>
<td>0.94</td>
<td>1.38</td>
<td>0.61</td>
<td>1.11</td>
</tr>
<tr>
<td>Quick Ratio</td>
<td>1.77</td>
<td>3.80</td>
<td>4.29</td>
<td>2.07</td>
<td>4.17</td>
</tr>
<tr>
<td>Debt Equity Ratio</td>
<td>0.54</td>
<td>1.02</td>
<td>0.33</td>
<td>0.64</td>
<td>0.42</td>
</tr>
<tr>
<td>Long Term Debt Equity Ratio</td>
<td>0.19</td>
<td>0.46</td>
<td>0.10</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>MANAGEMENT EFFICIENCY RATIOS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventory Turnover Ratio</td>
<td>11.10</td>
<td>9.48</td>
<td>7.59</td>
<td>6.24</td>
<td>5.36</td>
</tr>
<tr>
<td>Debtors Turnover Ratio</td>
<td>9.06</td>
<td>10.53</td>
<td>8.23</td>
<td>7.38</td>
<td>5.78</td>
</tr>
</tbody>
</table>

PROFITABILITY RATIOS:
Gross Profit Margin: The Gross Profit Margin ratio during the year March 2013 was negative returns i.e -14.53, but from March 2015 it started to get positive returns i.e. 14.81, 39.47 and 46.23 respectively. This shows that the company has seen the negative and positive trend during these five years also seen the growth in terms of profits.

Net Profit Margin: The Net profit margin ratio shows the negative returns during March 2013, but since March 2015 it has got positive returns of 15.52, March 2016 30.17 and March 2017 20.62 respectively. It shows that during March 2017 that there is a decline in Net profit of company.

Return on Capital Employed: The Return on Capital Employed has given the company the increased returns from March 2013, 1.14 to March 2017 9.45. This shows the consistency in the return on capital employed.

Return on Networth: The Return on Networth ratio was negative for two years March 2013 and March 2014. During the remaining years March 2015, March 2016 and March 2017 it has shown
the fluctuating trend where return was 3.25 in 2015, 8.71 in 2016 and 5.38 in 2017.

**Return on Assets Excluding Revaluations:** The return on assets excluding revaluations during March 2013 to March 2017 has shown the increasing trend i.e. 611.71 to 835.79. This shows that the company has increased its value of assets and the return on assets is positive.

**LIQUIDITY RATIOS:**

**Current Ratio:** This ratio is also known as working capital ratio, used to measure the short-term financial position or liquidity of a firm. In comparison with the industry standard ratio 2:1, the company during 2017 is 0.77, 2016 is 0.94, 2014 is 0.61 which is not satisfactory where the current liabilities are more than current assets, but during 2015 is 1.38 and 2013 is 1.11 which is satisfactory where the company has managed its liquidity position of the firm by paying its current obligations.

**Quick Ratio:** This ratio is used to measure the firm's capacity to pay off obligations immediately. The industry is 1:1. The company has a satisfactory ratio during all the years that indicates the company has the ability to meet its current liabilities immediately.

**DESCRIPTIVE STATISTICS - ANALYSIS AND INTERPRETATION:**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPM</td>
<td>5</td>
<td>20.692</td>
<td>24.54848712</td>
<td>10.97841719</td>
</tr>
<tr>
<td>GPM</td>
<td>5</td>
<td>17.064</td>
<td>25.83643706</td>
<td>11.55440591</td>
</tr>
<tr>
<td>NPM</td>
<td>5</td>
<td>5.948</td>
<td>22.77303823</td>
<td>10.18441231</td>
</tr>
<tr>
<td>ROCE</td>
<td>5</td>
<td>5.018</td>
<td>3.37220551</td>
<td>1.508096151</td>
</tr>
<tr>
<td>RONW</td>
<td>5</td>
<td>2.22</td>
<td>5.289792056</td>
<td>2.365666925</td>
</tr>
<tr>
<td>ROA</td>
<td>5</td>
<td>669.076</td>
<td>114.1271439</td>
<td>51.03921038</td>
</tr>
<tr>
<td>CR</td>
<td>5</td>
<td>0.962</td>
<td>0.299115362</td>
<td>0.133768457</td>
</tr>
<tr>
<td>QR</td>
<td>5</td>
<td>3.22</td>
<td>1.205072612</td>
<td>0.538924856</td>
</tr>
<tr>
<td>DER</td>
<td>5</td>
<td>0.59</td>
<td>0.267581763</td>
<td>0.119666202</td>
</tr>
</tbody>
</table>

**SOLVENCY RATIOS:**

**Debt Equity Ratio:** This ratio indicates the relationship between the outsiders funds and the shareholders funds. The company has a low ratio that is less than 1 all the years except 2016, which is not satisfactory for the shareholders because it indicates that the firm has not used the low-cost outsiders funds to increase their earnings.

**Long Term Debt Equity Ratio:** This ratio indicates the ability of a concern to meet its long-term obligations. The ratios during the study period is less than 1 which indicates that it is not satisfactory.

**MANAGEMENT EFFICIENCY RATIOS:**

**Inventory Turnover Ratio:** This ratio indicates the measure of the velocity of conversion of stock into sales. The company inventory turnover ratio indicates the increasing trend which shows that the company has efficient management of inventory as it converts its stock into sales very quickly. The ratio during March 2013 was 5.36 to 11.10 in March 2017.

**Debtors Turnover Ratio:** This ratio indicates capacity of debt collection. The company ratio shows the high velocity in collecting the debt. It also indicates the fluctuation during the five years from March 2013 to March 2017. The ratio shows upward trend during March 2013 was 5.78 to March 2016 10.53 and declined in March 2017 to 9.06.
Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. For the study sample size N is 5 number of observations have been considered that shows the Mean and Standard deviation of the company. All the descriptive statistics have the positive relationships with each other during the study.

The various profitability ratios OPM, GPM, NPM, ROCE, RONW and ROA have the direct relationship with each other, during the study it shows that there is a variation between each other. Major observation that ROCE is greater than RONW where the variation is less in ROCE and more in RONW indicates that there is significant improvement in profitability as well as liquidity of the company.

The Liquidity ratios CR and QR indicates the liquidity position of the company. As the study indicates that the company has managed its liquidity during the study period.

The Solvency ratios DER and LTDER indicates the ability to meet its long term obligations. During the study the company shows unfavourable condition.

The efficiency ratios ITOR and DTOR indicates the inventory and debtor turnovers, where the company during the study have managed both effienctly. The ITOR is less than DTOR.

### One-Sample Test

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPM</td>
<td>4</td>
<td>0.13</td>
<td>20.69</td>
<td>-9.79 - 51.17</td>
</tr>
<tr>
<td>GPM</td>
<td>4</td>
<td>0.21</td>
<td>17.06</td>
<td>-15.02 - 49.14</td>
</tr>
<tr>
<td>NPM</td>
<td>4</td>
<td>0.59</td>
<td>5.95</td>
<td>-22.33 - 34.22</td>
</tr>
<tr>
<td>ROCE</td>
<td>4</td>
<td>0.03</td>
<td>5.02</td>
<td>0.83 - 9.21</td>
</tr>
<tr>
<td>RONW</td>
<td>4</td>
<td>0.40</td>
<td>2.22</td>
<td>-4.35 - 8.79</td>
</tr>
<tr>
<td>ROA</td>
<td>4</td>
<td>0.00</td>
<td>669.08</td>
<td>527.37 - 810.78</td>
</tr>
<tr>
<td>CR</td>
<td>4</td>
<td>0.00</td>
<td>0.96</td>
<td>0.59 - 1.33</td>
</tr>
<tr>
<td>QR</td>
<td>4</td>
<td>0.01</td>
<td>0.59</td>
<td>0.26 - 0.92</td>
</tr>
<tr>
<td>DER</td>
<td>4</td>
<td>0.00</td>
<td>3.22</td>
<td>1.72 - 4.72</td>
</tr>
<tr>
<td>LTDER</td>
<td>4</td>
<td>0.07</td>
<td>0.18</td>
<td>-0.03 - 0.38</td>
</tr>
<tr>
<td>ITOR</td>
<td>4</td>
<td>0.00</td>
<td>7.95</td>
<td>5.04 - 10.87</td>
</tr>
<tr>
<td>DTOR</td>
<td>4</td>
<td>0.00</td>
<td>8.20</td>
<td>5.98 - 10.41</td>
</tr>
</tbody>
</table>

The one-sample t-test is used to test the sample mean that also use hypothesis test to suggest that the data is from population mean or it come from different population.

Two tailed sample test at the 5% level of significance is conducted to know the synergetic performance of Perimal Limited. T-values for all the financial ratios are positive at the degree of freedom 4 with respect to individual ratios at the 5% significant level, where it is observed that all the major ratios are less than 0.05. Hence the H₀ is rejected where the mean difference and the t statistic show that there is a difference in the performance of the company in post acquisition. But ROA show equal to zero, where H₀ is accepted. Therefore we can conclude that the Nicholas Perimal Limited has seen the changes in the performance after the post acquisition.

### VII. FINDINGS
- The profitability ratios have negative returns during the year March 2013 and March 2014 and positive returns during the year March 2015 to March 2017
The GPM was negative in March 2013 and March 2014, but from March 2015 to March 2017 it show the increasing trend from 14.81% to 46.23%.

The NPM and RONW is found negative in March 2013 and March 2014, from March 2015 to March 2017 it is shows positive with upward and downward trend in the returns.

The ROCE has positive returns with increasing trend during the period 1.14% in March 2013 to 9.45% in March 2017

The ROA has positive returns with increasing trend during the period 61.17 in March 2013 to 835.79 in March 2017

The Current ratio has shown the down trend from March 2013 to March 2017 that is 1.11 to 0.77.

The quick ratio has decliend from 4.17 in March 2013 to 1.77 in March 2017 during the study period.

The Solvency ratio shows the fluctuations in financial strength of the company during the study period. From creditors view point the low ratio has indicated favourable.

The efficiency ratio shows that the company have manged the inventory and debtors efficiently.

The RONW has less returns and the risk is more in comparision with ROCE has more returns and the risk is less.

The CR is less when compared to QR that is satisfactory during the study period.

The ITOR and DTOR has less risk and more returns that indicates the company has management the operations efficiently.

All the individual ratios T-Values are positive at the degree of freedom 4 where it is most of the ratios are less than 0.05 hence the Ho is rejected.

VIII. SUGGESTIONS

The company should strike the balance between the profitability and liquidity in their operations.

The company should turnout to be positive in their solveneey by meeting the long term financial obligations.

IX. CONCLUSION

M&A comes in many shapes and sizes, and investors need to consider the complex issues involved in M&A. The most beneficial form of equity structure involves a complete analysis of the costs and benefits associated with the deals.A merger can happen when two companies decide to combine into one entity or when one company buys another. An acquisition always involves the purchase of one company by another. The functions of synergy allow for the enhanced cost efficiency of a new entity made from two smaller ones. Synergy is the logic behind mergers and acquisitions. The company has shown that there is a significant difference in the synergetic performance of acquiring company.Nicholas Perimal Limited in post acquisition.

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