



The Systematic Study on Pre and Post-Merger Performance Evaluation of Selected Pharmaceutical Companies in India

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Abstract: Merger is one of the most popular means of inorganic expansion of the companies over the decades. It has been used for the restructuring the business organization. Merger is considered as one of the strategy to expand the business activities economically. This paper evaluate the pre and post-merger of financial and operating performance of pharmaceuticals companies by considering three years data to draw the conclusion. The result indicates that the financial performance has not been changed after the post-merger but operating performance has been drastically changed after the post-merger.

Key words: operating performance, financial performance, and diversification.

I. INTRODUCTION

Merger is a combination of two or more companies in which the assets and liabilities of the selling firms are absorbed by the buying firm. Although the buying firm may be a considerably different organization after the merger, it retains its original identity. In a merger one of the two existing companies merges its identity into another existing company or one or more existing companies may form a new company and merge their identities into a new company by transferring their businesses and undertakings including all other assets and liabilities to the new company. The shareholders of the company have substantial shareholding in the merged company. They will be allotted shares in the merged company in exchange for the shares held by them in the merging company or companies.

Now a days the economic reforms make the business activities more dynamic and competitive. The firms can achieve the growth by using the merger as a strategy to gain the market share nationally and internationally. It is considered as long term strategy to survive in the market for a longer period. Companies are trying to build their competencies and capabilities to grow profitability. Merger is the strategy to combine with another company to gain market share and operate as single entity. The companies go for the merger depends upon the scale and size of the business activities which reduces the competition and achieve economies in scale. This would help the companies to diversify their offering products and secure more resources which intended them to increase the profit.

Review of literature:

Carina Ribeiro (2022) assessed a study on impact of leverage in merger and acquisition process in US public companies. This master thesis includes the innovative models to design the leverage statues of the companies before and after merger and the data has been collected from secondary sources of annual reports with the study period of 1991-2019 and the sample size of 218 merger deals has been considered. This study results that transaction acquirers with Altman Z-scores above the median in pre merger performance, while the second considered transaction acquirers that had Altman Z-scores below the median in post merger performance and acquiring firms are highly levered in US public companies.

Faizan, (2020) focused a study on impact of mergers and acquisitions on the financial performance of bidding banks in Pakistan. He includes his research selected 51 listed bidder banks during 2002-2013 and used descriptive statistics, Z test and regression models have been used for analysis. Finally this study results show that M&A is failed to produce a fruitful result for bidding banks in Pakistan .Therefore this study recommended that direction and practical implication are provided to banks, investors, and policymakers to get knowledge about Merger and acquisition deals.

Boutheina(2018) conducted a study on effect of mergers and acquisitions on performance of Lebanese Groups. He mainly includes his study two research methods are used to compare pre- and post-merger financial performance: an analysis of ratios is used to compare the performance of Audi-Saradar Group during the pre-merger period (2000- 2003) and the post-merger period (2004-2007), second, paired sample t-test determines the significant differences in financial performance before and after the merger. Finally this results show that return on assets and return on equity improved but only insignificantly and there is no significant positive impact on the rate of return on shareholders' equity and on return on assets.

Desai and et.al, (2016), in their study it evaluates the pre and post-merger effects on the companies. Merger used as a corporate strategy to minimize the competition and work as a single entity .The main study focus on the operating performance and shareholder value after the merger procedures and considered only Indian companies to attain the research objective. The result reveals that there is no such financial improvement after the merger took place.

Gupta and komal (2015) the study considered the two cases of merger and acquisition which take place in the banking sector i.e. merger of ICICI and Bank of Rajasthan and the second merger HDFC bank with Centurion Bank of Punjab. The well-structured questionnaire were used to attain the research objective and indicates the there is a positive impact on the financial performance of the Banks after the merger strategy.

Sinha and et.al, (2011), they examined the scenario of financial service sector during the merger and acquisition. To attain research objective they collected the eighty cases of data from the period of March 1993 – Feb 2010 and 10 financial parameters were collected which represents the features of the firms. All the data has been analyzed to accomplish the research objective and it reveals that PBDITA and PAT had been positively affected the merger and acquisition

OBJECTIVES OF THE STUDY;

1. To understand the theoretical background of merger and acquisition in general.
2. To examine the pre and post-merger financial performance of selected pharmaceutical Companies.
3. To analysis the pre and post-merger operating performance of selected pharmaceutical Companies.

HYPOTHESES

1. H0: There is no significant difference between pre and post-merger financial performance of selected pharmaceutical Companies.
H1: There is a significant difference between pre and post-merger financial performance of selected pharmaceutical Companies.
2. H0: There is no significant difference between pre and post-merger operating performance of selected pharmaceutical Companies.
H2: There is a significant difference between pre and post-merger operating performance of selected pharmaceutical Companies.

RESEARCH METHODOLOGY:

The present study is purely based on data gathered from secondary sources. In this study we select for four major pharmaceutical companies such as, Sun Pharma Ltd, Cipla Ltd, Ranbaxy Laboratories and Torrent Pharmaceutical Ltd. The required data for the study has collected and compiled from the website www.moneycontrol.com. To measure the abnormal returns in the stock price reaction to mergers and acquisitions. Secondary sources have been used for collection of various financial ratios for three years (2017-2020) pre and three years (2020 to 2023) post-merger and acquisition of the sample companies. The announce dates and years of merger and acquisition of the sample firms has also verified from the BSE website.

Analysis and Interpretation

1. Pre and Post-Merger Financial Performance of Selected Pharmaceutical Companies:

Table No.1 indicates that pre and post-merger analysis of financial performance of selected Pharmaceutical Companies. The financial performance of the company is measured through in the following ratios such as, return on equity, price earnings ratio and earnings per share etc. The highest mean and standard deviation was recorded 4.308 (1.121) and 4.084 (2.201), this value represents that return on equity performance is good and increasing trend in post-merger performance when compared to the pre-merger performance in Sun Pharma Ltd and Cipla Ltd respectively. Further the highest mean and standard deviation was recorded 4.850(1.049) and 4.841(2.901), this value represents that price earnings ratio performance is good and increasing trend in post-merger performance when compared to the pre-merger performance in Cipla Ltd and Torrent Pharmaceutical respectively. This was followed by the highest mean and standard deviation was recorded 4.231 (1.199), this value represents that earning per share performance is good and

increasing trend in post-merger performance when compared to the pre-merger performance in Ranbaxy Laboratories Ltd.

Table No.1
Financial Performance

Companies	Summary of Statistics (Return on Equity)					
	Period	Mean	SD	Paired Sample T-Test	P-Value	Result
Sun Pharma Ltd	Pre-Merger	3.046	1.006	1.253	0.000	Rejected
	Post- Merger	4.084	2.201			
Cipla Ltd	Pre-Merger	2.928	0.802	2.154	0.000	Rejected
	Post- Merger	4.308	1.121			
Ranbaxy Laboratories	Pre-Merger	2.118	1.476	1.111	0.002	Rejected
	Post- Merger	3.182	1.690			
Torrent Pharmaceutical	Pre-Merger	4.422	1.917	2.457	0.515	Accepted
	Post- Merger	3.052	1.802			
Companies	Summary of Statistics (Price Earning Ratio)					
	Period	Mean	SD	Paired Sample T-Test	P-Value	Result
Sun Pharma Ltd	Pre-Merger	2.481	2.941	2.887	0.000	Rejected
	Post- Merger	3.330	3.940			
Cipla Ltd	Pre-Merger	1.952	4.921	3.121	0.000	Rejected
	Post- Merger	4.841	2.901			
Ranbaxy Laboratories	Pre-Merger	1.702	3.392	3.214	0.714	Accepted
	Post- Merger	2.531	1.030			
Torrent Pharmaceutical	Pre-Merger	3.639	0.037	4.444	0.002	Rejected
	Post- Merger	4.850	1.049			
Companies	Summary of Statistics (Earning Per Share)					
	Period	Mean	SD	Paired Sample T-Test	P-Value	Result
Sun Pharma Ltd	Pre-Merger	1.596	2.001	2.887	0.514	Accepted
	Post- Merger	2.034	1.975			
Cipla Ltd	Pre-Merger	0.165	1.939	3.121	0.000	Rejected
	Post- Merger	1.754	1.202			
Ranbaxy Laboratories	Pre-Merger	3.055	2.094	3.214	0.000	Rejected
	Post- Merger	4.231	1.199			
Torrent Pharmaceutical	Pre-Merger	3.457	1.100	4.444	0.000	Rejected
	Post- Merger	4.224	1.014			

Sources: Secondary Data.

Table No.1 depicts those results of paired sample T-Test of financial performance of selected pharmaceutical companies. The paired sample T-test is applied to check whether there are significant differences in the financial performance between pre and post-merger. As per the above statistical results there is no significant relationship between pre and post-merger analysis of return on equity, price earnings ratio and earnings per share, variables have been significant relationship between pre and post-merger analysis of financial performance. Therefore these variables are less than p value therefore null hypothesis should be rejected and alternative hypothesis should be accepted. It can be inferred that there is no improvement after post-merger performance of Sun Pharma Ltd Companies.

2. Pre and Post-Merger Operating Performance of Selected Pharmaceutical Companies:

Table No.2 indicates that pre and post-merger analysis of operating performance of selected Pharmaceutical Companies. The financial performance of the company is measured through in the following ratios such as, return on assets, assets turnover ratio and operating profit ratio etc. The highest mean and standard deviation was recorded 4.818 (1.864), this value represents that return on assets performance is good and increasing trend in post-merger performance when compared to the pre-merger performance in Sun Pharma Ltd. Further the highest mean and standard deviation was recorded 4.444 (1.777), this value represents that assets turnover ratio performance is good and increasing trend in post-merger performance when compared to the pre-merger performance in Cipla Ltd. This was followed by the highest mean and standard deviation was recorded 4.814 (2.099) and 4.214 (1.874), this value represents that operating profit ratio performance is good and increasing trend in post-merger performance when compared to the pre-merger performance in Ranbaxy Laboratories Ltd and Torrent Pharmaceutical Ltd respectively.

Table No.2
Operating Performance

Companies	Summary of Statistics (Return on Assets)					
	Period	Mean	SD	Paired Sample T-Test	P-Value	Result
Sun Pharma Ltd	<i>Pre-Merger</i>	2.106	1.926	1.743	0.715	<i>Accepted</i>
	<i>Post- Merger</i>	4.818	1.864			
Cipla Ltd	<i>Pre-Merger</i>	3.756	1.099	2.456	0.000	<i>Rejected</i>
	<i>Post- Merger</i>	2.650	2.747			
Ranbaxy Laboratories	<i>Pre-Merger</i>	3.014	1.211	2.444	0.888	<i>Accepted</i>
	<i>Post- Merger</i>	3.896	1.421			
Torrent Pharmaceutical	<i>Pre-Merger</i>	3.213	1.111	3.012	0.874	<i>Accepted</i>
	<i>Post- Merger</i>	2.920	1.879			
Companies	Summary of Statistics (Assets Turn Over Ratio)					
	Period	Mean	SD	Paired Sample T-Test	P-Value	Result

Sun Pharma Ltd	Pre-Merger	2.487	1.011	2.187	0.000	Rejected
	Post- Merger	3.111	1.221			
Cipla Ltd	Pre-Merger	3.714	1.423	1.472	0.002	Rejected
	Post- Merger	4.444	1.777			
Ranbaxy Laboratories	Pre-Merger	3.214	1.541	2.541	0.000	Rejected
	Post- Merger	2.147	1.022			
Torrent Pharmaceutical	Pre-Merger	2.111	1.071	3.111	0.000	Rejected
	Post- Merger	3.777	1.031			
Companies	Summary of Statistics (Operating Profit Ratio)					
	Period	Mean	SD	Paired Sample T-Test	P-Value	Result
Sun Pharma Ltd	Pre-Merger	2.111	1.011	2.113	0.001	Rejected
	Post- Merger	3.417	1.234			
Cipla Ltd	Pre-Merger	3.112	1.211	2.712	0.745	Accepted
	Post- Merger	4.127	1.781			
Ranbaxy Laboratories	Pre-Merger	2.888	1.113	1.456	0.000	Rejected
	Post- Merger	4.814	2.099			
Torrent Pharmaceutical	Pre-Merger	3.122	1.312	2.777	0.000	Rejected
	Post- Merger	4.214	1.874			

Sources: Secondary Data

Table No.2 represents the results of paired sample T-Test of operating performance of selected pharmaceutical companies. The paired sample T-test is applied to check whether there are significant differences in the operating performance between pre and post-merger. As per the above statistical results there is no significant relationship between pre and post-merger analysis of return on assets, assets turnover ratio and operating profit ratio, variables have been significant relationship between pre and post-merger analysis of operating performance, these variables are less than p value therefore null hypothesis should be rejected and alternative hypothesis should be accepted. It can be inferred that there is more and significant improvement in post-merger performance in selected above pharmaceutical companies.

Findings

1. In the context of return on assets post-merger performance is good in Sun Pharma Ltd compared to the other pharmaceutical companies.
2. The EPS and price earning ratios post-merger performance is good in Cipla Ltd and Torrent Pharmaceutical companies
3. The result shown by paired sample 't' test reveals that the difference in financial performance ratios of pre and post-merger is *not significant* in the selected pharmaceutical companies.
4. In the context of return on assets pre-merger performance is good compared to the post-merger performance in Ranbaxy Laboratories and Torrent Pharmaceutical companies.

5. The Assets Turnover Ratio and Operating Profit Ratio post-merger performance is better and increasing trend in all selected four pharmaceutical companies.
6. The statistical results show that difference in operating performance ratios of pre and post-merger is *significant* in the Ranbaxy Laboratories and Torrent Pharmaceutical companies.

Recommendations for the Study:

1. The Pharmaceutical companies should have an effective management especially for controlling all the financial affairs and internal analysis has to be undergone by the management in order to know about its financial position year after year.
2. The income of the acquired company can be regained by adopting new technologies for production.
3. The acquired industry should increase their other income in order to gain more profit.
4. M & A activity require huge investment whether buying any firm domestically or internationally, therefore large firm can only impact export performance through this route.
5. Sun Pharma need to check its operating expenses as its operating profit decreased after merger

Conclusion

A company can prosper its business activities through internal expansion or external expansion. If they want to go for the internal expansion they acquire new assets, elaborating their business activities by using new technological advancement and installation of new product lines. But in external expansion the firms are intended to apply the merger strategy to merge with another country to minimize the competition and act as a single entity. This would results in the free flow of capital, breaking trade barriers, strong competition for the development of the business nationally and internationally.

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