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PERFORMANCE ANALYSIS: PRE AND POST MERGER OF INDIAN PHARMACEUTICAL COMPANIES

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ABSTRACT

The concept of merger and acquisition appears to be easy but rigid to implement. This paper aims at analysing the financial performance of the companies that undergo merger and acquisition in the pharmaceutical sector. The concept of merger and acquisition appears to be easy but rigid to implement. There are mainly three segments of merger: Pre-merger, transition merger and post-merger. A sample of six companies in the pharmaceutical sector for the year 2010-16 was selected based on convenient sampling. Paired sample t-test was used for the study using SPSS software. The results show that the financial performance after acquisition when compared with pre-acquisition shows a decreasing trend. The internal and external stakeholders (investors, management, debtors and creditors) can benefit out of this research.

Keywords: Financial performance, T-test, Financial ratios

INTRODUCTION

In this competitive world, the large number of companies have set up its production in order to meet the end goals of the growing population. The performance of each firm fluctuates according to its demand factor. The key explanation behind running an organization or business is to expand the investor's wealth. A careful examination of a firm's financial position can be analyzed using the financial performance of the organisation. A company's financial performance may vary due to some internal or external factors. The cause for such downfalls of the financial performance of the firm can be restricted to an extent through the process of merger and acquisition. Merger and acquisition are the processes where the acquirer firm takes control over the acquired firm in order to hold back the impact of the loss of the firm. Maditinos, D. (2009) in his study elucidated that two companies are more valuable than when they are separated. The merger of a company happens when one firm merges with another firm with a view to expanding the wavelength of its business. Devi, M. N. (2016) in her article talks about the five-fundamental type of merger such as conglomerate merger, horizontal merger, market extension merger,

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vertical merger, and product extension merger. Each term depicts various kind of merger on the basis of monetary capacity, reason for the business exchange and the connection between the merging companies. Conglomerate merger means takeover between the firms that are associated with completely different ventures. Horizontal Merger happens between the companies in the same field. It is a business alliance that occurs between companies which operate in the same environment, mainly as competitors which offers same kind of goods and services to the customers. A market extension merger happens between two firms that deals with the same kinds of products but in entirely different markets. The main objective behind such merger is to ensure that the companies can enhance a better exposure to an improved market which ensures an enlarged customer base. The product extension merger occurs between two firms that deals in goods that are associated with each other and function in the same market. It permits the merging companies to cluster their products according to the same characteristics and get connected to a bigger set of customers. This helps in earning a higher profit for the firm. Vertical merger happens between two firms creating different goods or services but result in one definite finished output.

The concept of merger and acquisition should be looked upon with a view to enhance the value of the firm. When a firm takes over the other, the culture will also get incorporated into the merged companies. Finance, Drugs, Pharmaceuticals, Textiles, Telecommunication are major segments in which merger occurred. Corporates undergo merger and acquisition due to tough competition, changing customer needs, economies of scale, advancement in technologies etc. (Jayakumar, 2013) This may happen between either two strong firms or two weak firms or either strong or weak firm.

Pharmaceuticals markets are authorized to make drugs mostly within the context of healthcare. As per IBEF, India has become the largest exporter of generic medicines and gained second largest share in pharma and biotech. The pharma market of India has witnessed a Compound Annual Growth Rate (CAGR) of 5.64% in FY 2017-18.

REVIEW OF LITERATURE

The performance of the company in the industry may not be the same. It might change depending on the internal as well as external factors which influence the business. A better performing organisation can take over an underperforming company in order to bring back the company on the right track. Amalgamation of two underperforming company or two progressive company can also be considered as merger which helps them in gaining a better performance. There are three stages in the merger: pre-merger, transition, and post-merger stage. When companies undergo a merger, its performance varies in each of the stages. An analysis is

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necessary to find out the performance of the company in each of the stages. The profitability and liquidity position of a company has a greater impact on the performance of a company. Thus it has a greater impact on the company when it goes for merger and acquisition. As indicated by Gupta (2017), it was observed that the profitability and solvency position of the organization significantly affects the different sorts of ventures in India after mergers and acquisition. Jayakumar (2013) in his article, assess the financial, operational and liquidity position of the company by using paired sample t-test. When analysing the outcome of the merger and acquisition, it can affect the performance of the company both positively or negatively.

Ghosh (2001), through his study, explains that consolidated organisations have a significant improvement in operating performance and the liquidity performance of the acquirer companies as there is an increase in the financial performance after the merger and acquisition. Vanitha and Selvam (2007), in their study stated that the financial performance of acquirer companies enhances after merger and acquisition. The article by Ramaswamy and Waegelein (2003) reveals that there is an improvement in the post-merger operating financial performance estimated by industry-adjusted return on assets. As indicated by Vidhisha Vyas (2012), it was observed that there occur huge makeovers because of mergers and acquisitions and merged companies perform better than non-merged companies. Even though the studies have made a positive impact on financial performance which led to the growth of the firm there are still certain researches that have ceu shown a negative impact on its financial performance. Kumar (2009) reveals that on an average, the post-merger profitability, assets turnover and solvency of the procuring organizations demonstrate a decline in performance when matched with pre- merger performance. Mergers usually don't prompt in the improvement of the acquirer’s financial performance. Pazarskis, Vogiatzogloy, Christodoulou, and Drogalas (2006) found that the profitability of a firm reduces due to merger and acquisition. After analysing above articles it was understood that the merger and acquisition have both positive and negative impact on the financial performance of the company. Indian pharmaceutical sector is in its progressive stage and it represents the second major in the world by volume and is one among the stone pillars of the manufacturing sector in India. Globally, 20 percent of export in generic medicine is handled by India. In FY16, India exported pharmaceutical items worth USD 16.89 billion, with the number anticipated that would achieve USD 40 billion by 2020. The nation's pharmaceutical industry is anticipated to grow at a CAGR of 12.89 percent over 2015–20 to achieve USD 55 billion (www.IBEF.com) as a result a rapid development in this industry is certain in the coming years.

STATEMENT OF THE PROBLEM

The pharmaceutical sector in India supplies 50 % of global demand vaccines. The rapid increase

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in sales accounts to $1.56 billion in the year 2018. The pharmaceutical sector rank 6th in terms of its size. As a result, the pressure on the manufacturers in the manufacturing of drug has been increased rapidly due to the competitive environment. M&A is one of the ways to survive in the competitive field and to achieve long-term benefits, therefore, most of the companies have undergone mergers. Mergers and acquisition aim at consolidation of companies and rapid expansion of the acquired company. Most articles have taken solvency and operating ratios for analysing the financial performance of Pharmaceutical companies as a base for analysis. Not many studies have been conducted to understand the financial performance using liquidity, profitability and operating ratios. This will help internal and external stakeholders (investors, management, debtors and creditors) in understanding the financial performance and decision making.

OBJECTIVES

- To analyze the liquidity position of the acquired company before and after the M&A
- To analyze the profitability position of the acquired company before and after the M&A
- To analyze the operating position of the acquired company before and after the M&A

HYPOTHESIS

H1: M&A has a significant impact on the liquidity position of the acquired company.

H2: M&A has a significant impact on the profitability of the acquired company

H3: M&A has a significant impact on the operating performance of the acquired companies

RESEARCH METHODOLOGY

The study was done using various financial ratios like current ratio, quick ratio, return on equity, return on asset, debtors' turnover ratio, creditors' turnover ratio, inventory turnover ratio, operating profit, net profit, fixed asset ratio. The study was based on secondary data. The data for the selected companies have been collected from annual reports using Ace analyser, and Prowess IQ.

The below-listed companies have been selected for the study.

1. Abbott (2010)
2. Torrent pharma (2014)
3. Sun Pharma (2014)
4. Lupin (2015)

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5. Dr. Reddy's Laboratories (2016)
6. Cipla (2016)

A sample of six companies that undergo merger and acquisition for the period of 2010-2016 was chosen for the study based on convenient sampling. Three-year pre and post financial data were collected based on the availability. To study the performance of the selected pharmaceutical sector companies' financial ratios were used. A firm's profitability is measured by four ratios: operating profit, return on equity, return on asset, net profit ratio, and gross profit. The liquidity position is ascertained by quick ratio and current ratio and operating performance are ascertained by debtor's turnover, creditors turnover ratio, fixed asset ratio, and inventory ratio. The study was performed by paired sample t-test using SPSS software.

ANALYSIS AND INTERPRETATION

Pre and post financial performance of Pharmaceutical companies that have merged during the period 2010-2016 were analyzed independently using financial ratios. Operating, liquidity and profitability positions of the companies were analyzed for six companies.

Table 1: Liquidity Ratio

	Quick Ratio			Current Ratio		
Acquirer	**Pre**	**Post**	**Sig**	**Pre**	**Post**	**Sig**
Abbott	1.27	1.25	0.962	1.92	1.56	0.491
Cipla	1.32	1.45	0.78	2.32	2.57	0.746
Lupin	1.53	2.54	0.208	2.32	3.53	0.241
Reddy	1.63	1.62	0.973	2	2.01	0.99
Sun Pharma	3.69	0.6	0.027	4.41	0.83	0.021
Torrent	1.15	1.46	0.129	1.71	2.12	0.122

(Significance p value >0.05)

Liquidity ratios are those ratios which are used to quantify the ability of the organization to fulfil its short term commitments without raising further funds from outside. Quick ratio and current ratio were used to analyze the liquidity positions of the company. Quick ratio is an indicator which shows the firms capacity to encounter its short-term commitments with its most liquid assets. Current ratio is an indicator that shows the firm's ability to meet its short-term liabilities. Table 1 portrays quick ratio, out of the six companies, three companies have enhanced their

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performance but the remaining three firms have weakened in their performance after the merger. The companies Sun Pharma, Dr. Reddy Laboratories and Abbott are negatively affected by the merger and acquisition. It is clear from the table that the liquidity position of these companies has been declined by -3.08, -0.01 and -0.02 respectively. The remaining companies have shown an increasing trend in the liquidity position among that Lupin shows a better liquidity position. Out of the six companies, three companies have improved their liquidity position while other three companies declined. Table 1 reveals that the companies that have merged don't show a statistically significant performance except for Sun Pharma. The liquidity position of Sun Pharma is statistically significant (p value>0.05). While in the case of Current ratio, four companies have improved their performance while two companies declined. It was found that except Sun Pharma (p value>0.05) none of the companies showed a statistically significant performance. When analysing table 1 it was concluded that the liquidity position of the merged companies is better than it was before but statistically insignificant. Thus the hypothesis made for the analysis is rejected and the null hypothesis is accepted.

Table 2: Profitability Ratios

	Operating profit			ROE			ROA			NPR			Gross Profit		
Acquirer	Pre	Post	Sig	Pre	Post	Sig	Pre	Post	Sig	Pre	Post	Sig	Pre	Post	Sig
Abbott	803.06	1054.44	0.631	27.017	27.34	0.958	17.76	10.68	0.082	9.72	7.71	0.246	104.52	163.09	0.221
Cipla	1078.35	1063.77	0.979	13.8	10.07	0.172	10.51	8.14	0.288	14.94	11.33	0.276	1790.05	1614.1	0.609
Lupin	12094	3611.75	0.463	30.91	26.43	0.563	20.7	21.5	0.904	19.1	23.913	0.239	1955.87	3745.13	0.041
Reddy	1339.31	402.37	0.04	17.58	9.466	0.05	11.35	6.47	0.053	12.84	6.47	0.013	2122.2	1306.03	0.167
Sun Pharma	1852.82	959.55	0.344	16.293	-16.6	0.141	14.12	-9.17	0.115	36.01	-44.15	0.136	1280.946	-1814.04	0.051
Torrent	493.34	1303.27	0.327	32.59	38.22	0.483	15.72	18.12	0.544	17.27	22.5	0.261	464.6363	1367.633	0.149

Profitability ratios are a type of financial ratios that are used to measure the firm's capacity to create income based on the expenses related to it. Operating profit, ROE, ROA, NPR, and Gross Profit were used to find out the profitability ratio. Operating profit is used to analyze the amount of profit a firm makes based on the sales made, after providing variable costs of production but before providing interest and tax. Return on Equity (ROE) is ratio which is used to analyze the financial performance based on the earnings available to equity shareholders. Return on Assets (ROA) is used to analyze the amount of profit earned by the firm based the number of assets possessed by the company. Net Profit Return (NPR) is the ratio which indicates the amount of

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profit earned by the firm after paying all expenses including interest and tax, from sales. Gross profit ratio is used to identify the relationship between gross profit and sales. Table 2 reflects that Torrent and Abbott have shown a constructive impact on its operating performance by 809.9 and 251.383 respectively while other companies failed. The two companies that have improved show insignificant performance on operating profit. ROE of two companies has improved while four companies dropped after the merger. Only Torrent and Abbott have shown a progress in ROE by 5.633 and 0.3266 respectively. Out of the two companies improved none of them are statistically significant. It was observed that ROA of only two companies (Lupin and Torrent) have improved while four companies were negatively affected. The net profit margin of the three companies has become greater than before while the other three were weakened. Sun Pharma, Torrent Pharma, and Lupin have shown an increase in their net profit return by 8.1473, 5.234 and 4.8133 respectively. Out of the six companies, only two companies have improved their performance in gross profit while four companies declined. In conclusion to the above, it was found that after the merger, the profitability of the companies has declined than pre-acquisition. H2 is rejected and thus M&A has a significant impact on the profitability of the acquired company

Table 3: Operating Ratios

	Debtors turnover ratio			Creditors turnover ratio			Inventory turnover ratio			Fixed Asset turnover		
Acquirer	pre	post	sig	pre	post	sig	pre	post	sig	pre	post	sig
Abbott	22.71	17.39	0.018	12.35	11.22	0.561	6.76	6.26	0.52	18.01	20.43	0.358
Cipla	5.2	5.44	0.584	5.1133	4.2	0.009	3.44	3.98	0.04	70.21	71.7	0.709
Lupin	3.98	3.26	0.078	4.22	4	0.007	11.53	10.07	0.017	3.88	4.85	0.06
Reddy	2.713	2.293	0.301	4.11	3.93	0.717	5.29	5.2	0.015	58.9867	64.2567	0.632
Sun	4.42	5.53	0.026	5.32	4.76	0.156	4.7	3.43	0.346	37.04	21.373	0.116
Torrent	5.173	3.63	0.299	3.04	2.49	0.125	10.18	8.667	0.101	3.48	2.68	0.469

(Significance p value >0.05)

Operating ratio is used to compare the expenses related to operations in connection to income from activities. Smaller the ratio, greater the firm's ability to create profit. The operating performance includes debtor's turnover ratio, creditor's turnover ratio, inventory turnover ratio, and fixed asset turnover ratio. Debtors/ Receivables Turnover Ratio is used to measure the company's ability in collecting the debts related to the credit availed. Creditors/ Payables Turnover Ratio is a short-term liquidity measure which is used to compute the rate at which a firm pays off its creditors. Inventory Turnover Ratio is used to indicate the period required for the company to convert the inventory into revenue during a specific period. Fixed Assets Turnover Ratio is used to analyze the operating performance based on the fixed assets the firm possess.

Table 3 reflects that there is a negative impact on the operating performance of four companies while only two have indicated a significant advancement in debtors' turnover ratio. Cipla and Sun Pharma have revealed a progress by 0.24 and 1.11 respectively. But the progress is not satisfactory. It is evident from Table 3 that only Abbott and Sun Pharma (p value >0.05) showed a statistically significant performance compared to the rest of the firms. From the analysis, it was found that no company has shown an improvement in there creditor's turnover ratio after the merger. But Lupin and Cipla (p value >0.05) show a statistically significant performance on creditors turnover ratio compared to rest of the firms. In case of inventory turnover ratio, only one company (Cipla) have presented an improvement by 0.54, while others had a negative impact on the operating performance. From the above analysis, it is evident that Lupin, Cipla and Dr. Reddy (p value >0.05) have a statistically significant performance on Inventory Turnover ratio. When analysing table 3 it was observed that all companies except Sun pharma and Torrent have a positive effect on the fixed asset turn over after the merger. Abbott, Cipla, Lupin and Dr. Reddy have upgraded their operating performance by 2.42, 1.49, 0.97 and 5.27. It is identified that none of the companies have a statistically significant performance on the Asset Turnover Ratio. It was concluded that there is a decline in the operating performance of pharmaceutical companies after the merger and was statistically insignificant. Thus, the hypothesis made for the analysis is rejected and the null hypothesis is accepted.

CONCLUSION

The aforesaid paper provides an overview of the changes that took place in the pharmaceutical sector because of the occurrence of merger and acquisition during the period 2010-2016. For the purpose of the study, six prominent pharmaceutical companies that have undergone merger and acquisition during the period have been selected. From the above analysis, it is evident that the hypothesis made for the analysis has been rejected (p value<0.05). No much change in financial performance has, been found in those pharmaceutical companies even after the merger and acquisition.

SCOPE FOR FURTHER STUDY

This study is confined to the findings of only 6 pharma companies that have undergone merger and acquisition for the period 2010-2016. Only the financial performance of the company was selected. The study doesn't take into consideration any primary data. The study is undertaken only for the pre-merger period of three years and the post-merger period of three years.

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