

Study on Financial Performance of Indian Pharmaceutical Industry: Pre and Post Merger Period

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Abstract

In the global pharmaceuticals sector, India is a significant and rising player. In today's globalized economy, the main objective of every firm is to make profits and enhance the shareholders' wealth. In the global market, a number of companies among Indian pharmaceuticals have entered into Merger and Acquisition agreements. Mergers and acquisitions (M&As) are one of the mechanisms by which firms gain access to new resources and, via resource redeployment, increase revenues and reduction in costs. The objective of the study is to evaluate the Financial Performance of select pharmaceutical companies in the pre and post-merger period. For the present study, eight pharmaceutical companies listed under BSE involved in M&A activities in India after the recession period, i.e. after 2007, were chosen. The analysis is based on the various ratios which are compared between pre and post-event periods. Other statistical tools- Mean, Standard Deviation, Co-efficient of Variation and Paired 't' test have been used in this research.

Keywords: Pharmaceuticals, Acquisition Agreements, Mergers and Acquisitions, Recession

the Indian pharmaceutical market increased by 17.7% annually, up from 13.7% in July 2020. The size of India's pharmaceutical market stood at USD 42 billion in 2021. Globally, India is the largest provider of generic drugs. The country is the third-largest producer of pharmaceuticals in the world by volume and the 14th-largest by value.

One of the main elements of contemporary corporate restructuring is the boom in mergers and acquisitions. Mergers and acquisitions (M&As) are one of the mechanisms by which firms gain access to new resources and, via resource redeployment, increase revenues and reduction in costs. This major proposition for the M&As increased activity is mainly imposed by intense competition, evolving technology, low-interest rates, changing regulations in the financial markets, and many other factors.

In this development, here an attempt has been made to examine the phenomenon of M&A activities in selected pharmaceutical companies in India through empirically analysing the performance of 8 pharmaceutical companies listed at the Bombay Stock Exchange (BSE) that executed acquisitions during the period from 2003-04 to 2015-16, by comparing various financial ratios pertaining to solvency, activity and profitability between pre and post-event periods.

Introduction

In the global pharmaceuticals sector, India is a significant and rising player. India is the world's largest supplier of generic medications, accounting for 20% of the worldwide supply by volume and supplying about 60% of the global vaccination demand. In August 2021,

Review of Literature

Oloye and Osuma (2015) explored that to examine the impacts of mergers and acquisition of commercial bank's performance in Nigeria as the main objective. The research used shareholders fund and profit after tax of the selected banks as proxies to measure the financial efficiency

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of the banks in both pre and post consolidation eras in Nigeria. According to Neha Duggal, (2015) M&A were considered as a significant tool for corporate restructuring and value creation in the present scenario. Long (2015) the study recommended that the banks should come up with more aggressive strategies that would improve their performance and financial efficiency in order to gain the most from post-merger and acquisition. Furthermore, the results indicated that firm size and growth had a significantly positive relationship with firm profitability, while debt capital decreases firm profitability. Bassi and Gupta's (2015) study was based on secondary data from five banks. The study concluded that investors were getting abnormal returns due to the announcement of the merger and acquisition. Moreover, the event positively impacted the overall financial valuation of the company. Rooplata and Sathya (2015) noted in their study to find out whether the merger and acquisition deal between the two banks (Centurion Bank and Bank of Punjab and HDFC) was successful or not. This merger showed good results on their balance sheet and improved their profitability, solvency, leverage ratios etc. Tang and Alger (2015) The results showed that using return on assets, financial performance significantly decreased after the merger. However, found no significant change in the abnormal return on an asset before and after the merger activity. This may be indicated that the decrease in the return on assets was caused by market movement and not by the merger activity. Chaudary and Sarwar (2015) determined the shareholders' wealth of the acquirer U. S. pharmaceutical companies after M&A. Sahu and Agarwal (2015) observed that M&A were common strategies of firms to increase the performance and also brought to the fore the factors affecting M&A activities in the Indian pharmaceutical sector.

Objective of the Study

- To evaluate the Financial Performance of the select Indian Pharmaceutical Companies in the pre and post-merger period.

Methodology

The present study is based on eight pharmaceutical companies listed under BSE which involved in M&A activities in India after the recession period, i.e. after 2007. The basic criterion of this research is that the

M&A deals should have been exhibited after 2007, and Acquirer should have had at least five financial years in both pre and post-merger periods. Out of 61 M&A deals in India, 8 M&A only occurred after 2007 and hence considered for the study. The annual reports of the select eight companies were collected from the CMIE data-base and the respective company websites. The period of study comprising five financial years before-merger and after-merger for the select eight companies ranged between 2003-04 and 2015-16.

Tools of Analysis

- Solvency ratios and Profitability ratios were computed and compared between pre and post-merger periods.
- The statistical tools, namely Mean, Standard Deviation, Co-efficient of Variation and Paired 't' test, were employed in this research.

Ratio Analysis

The list of financial ratios measuring various aspects of the financial performance of the manufacturing companies involved in acquisition activities selected for the present study is given below:

Solvency Ratios

- Short term: Current Ratio
- Long term: Debt-Equity Ratio

Profitability Ratios

- Net Profit Ratio

The details of the ratio analysis are discussed in the following table with the appropriate statistical tools.

Solvency Ratios

Short-Term Solvency Ratios

Current Ratio

The current ratio may be defined as the relationship between current assets and current liabilities. This ratio, also known as the working capital ratio, is a measure of general liquidity and is most widely used to make the

analysis of a short-term financial position of concern. The standard norm is 2:1.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current assets include cash in hand, cash at the bank, marketable securities, inventories, sundry debtors, etc.

current liabilities include outstanding expenses, sundry creditors, short-term advances, income-tax payable, dividends payable, interest accrued but not due on loans and provisions.

H₀: There is no significant difference in current ratio between before and after merger period of the selected companies.

Table 1: Current Ratio

(In Times)								
Period	SMS Pharmaceuticals Ltd.	Strides Shasun Ltd.	Sequent Scientific Ltd.	Sri Krishna Pharmaceuticals Ltd.	Makers Labs Ltd.	Abbott India Ltd.	Aarti Drugs Ltd.	IPCA Labs. Ltd.
Before Merger	1.803	4.096	7.237	1.411	3.795	3.124	3.440	3.402
	1.708	3.834	2.913	1.436	4.530	3.449	3.782	4.380
	2.130	2.367	3.859	1.285	3.598	3.477	2.925	4.394
	3.428	2.160	2.544	1.474	4.213	3.705	2.753	3.774
	3.079	2.532	3.978	1.470	5.322	5.854	3.133	4.904
Mean	2.430	2.998	4.106	1.415	4.292	3.922	3.207	4.171
SD	0.778	0.897	1.854	0.077	0.681	1.100	0.411	0.587
CV (%)	32.017	29.937	45.140	5.452	15.858	28.042	12.820	14.078
After Merger	2.591	3.146	2.705	1.470	3.767	4.113	2.444	5.039
	2.232	8.172	1.74	1.778	2.326	4.231	2.670	3.561
	1.989	1.811	1.615	2.063	2.225	5.321	2.518	4.109
	2.076	2.916	1.401	2.161	2.179	5.241	2.352	3.748
	1.924	3.341	1.591	2.161	2.755	4.848	2.648	3.696
Mean	2.162	3.877	1.810	1.927	2.650	4.751	2.526	4.031
SD	0.266	2.473	0.514	0.300	0.664	0.559	0.135	0.599
CV (%)	12.303	63.775	28.416	15.551	25.071	11.773	5.331	14.867
Paired 't'	0.620	0.943	3.724	3.773	3.669	1.671	4.405	0.286
'p' Value	0.569 ^{NS}	0.399 ^{NS}	0.020**	0.020**	0.021**	0.170 ^{NS}	0.012**	0.789 ^{NS}

Source: Annual Reports of the respected companies.

It is highlighted from Table 1 that the mean value of the current ratio before the merger period endowed by 2.430 in SMS Pharmaceuticals, followed by 2.998 in Strides Shasun, 4.106 in Sequent Scientific Limited, 1.415 in Sri Krishna Pharmaceuticals Limited, 4.292 in Makers labs, 3.922 in Abbott India, 3.207 in Aarti Drugs and 4.171 in IPCA Labs. The coefficient of variation of the current ratio is endowed by 32.017 per cent in SMS

Pharmaceuticals, followed by 29.937 per cent in Strides Shasun, 45.140 per cent in Sequent Scientific limited, 5.452 per cent in Sri Krishna Pharmaceuticals limited, 15.858 per cent in Makers labs, 28.042 per cent in Abbott India, 12.820 per cent in Aarti Drugs and 14.078 per cent in IPCA labs. The table shows that the current ratio in Sri Krishna Pharmaceuticals Limited is constant, and on the other hand, it is fickle in Sequent Scientific limited.

It is noted from the mean value of the current ratio in after merger period endowed by 2.162 in SMS Pharmaceuticals, followed by 3.877 in Strides Shasun, 1.810 in Sequent Scientific Limited, 1.927 in Sri Krishna Pharmaceuticals Limited, 2.650 in Makers labs, 4.751 in Abbott India, 2.526 in Aarti Drugs and 4.031 in IPCA Labs. The coefficient of variation of the current ratio is endowed by 12.303 per cent in SMS Pharmaceuticals, followed by 63.775 per cent in Strides Shasun, 28.416 per cent in sequent Scientific limited, 15.551 per cent in Sri Krishna Pharmaceuticals Limited, 25.071 per cent in Makers labs, 11.773 per cent in Abbott India, 5.331 per cent in Aarti Drugs and 14.867 per cent in IPCA labs. The table shows that the current ratio in Aarti Drugs Limited is constant, and on the other hand, it is fickle in Strides Shasun limited.

The result of paired t-test shows the null hypothesis of the companies SMS Pharmaceuticals Ltd., Strides Shasun Ltd., Abbott India Ltd. and IPCA Labs. Ltd. are accepted. On the other hand, the null hypothesis of the companies Sequent Scientific Ltd., Sri Krishna Pharmaceuticals Ltd., Makers Labs Ltd. and Aarti Drugs Ltd. is rejected. Hence, it is noted that there is no significant difference between the before and after merger period of the companies SMS Pharmaceuticals Ltd., Strides Shasun Ltd., Abbott India Ltd. and IPCA Labs. Ltd., and on the other hand, there is a significant difference between the before and after merger period of the companies Sequent Scientific Ltd., Sri Krishna Pharmaceuticals Ltd., Makers Labs Ltd. and Aarti Drugs Ltd. in its current ratio.

It is concluded that Makers Labs has the highest mean value, and Sri Krishna Pharmaceuticals Limited has less consistency in the current ratio. The coefficient variation of Sri Krishna Pharmaceuticals Limited is constant, and on the other hand, it is fickle in Sequent Scientific limited

in the before-merger period. On the other hand, Abbott India has the highest mean value, and Sequent Scientific Limited has the low volatile in the current ratio, and the coefficient variation of Aarti Drugs Limited is constant, and on the other hand, it is fickle in Strides Shasun limited in the after merger period. Further, there is a significant difference between the before and after merger period of the companies Sequent Scientific Ltd., Sri Krishna Pharmaceuticals Ltd., Makers Labs Ltd. and Aarti Drugs Ltd. in its current ratio.

Long-Term Solvency Ratios

Debt Equity Ratio

Debt equity ratio shows the relative claims of creditors (Outsiders) and owners (Interests) against the assets of the firm. Thus this ratio indicates the relative proportions of debt and equity in financing the firm's assets. It can be calculated by dividing outsider funds (Debt) by shareholder funds (Equity)

$$\text{Debt Equity Ratio} = \frac{\text{Outsider Funds (Total Debts)}}{\text{Shareholder Funds or Equity}}$$

The outsider fund includes long-term debts as well as current liabilities. The shareholder funds include equity share capital, preference share capital, reserves and surplus, including accumulated profits. However, fictitious assets like accumulated deferred expenses etc. should be deducted from the total of these items to shareholder funds. The shareholder funds so calculated are known as the net worth of the business.

H_0 : There is no significant difference in debt equity ratio between before and after the merger period of the selected companies.

Table 2: Debt Equity Ratio

(In Times)								
Period	SMS Pharmaceuticals Ltd.	Strides Shasun Ltd.	Sequent Scientific Ltd.	Sri Krishna Pharmaceuticals Ltd.	Makers Labs Ltd.	Abbott India Ltd.	Aarti Drugs Ltd.	IPCA Labs. Ltd.
Before Merger	12.624	0.889	0.000	1.178	0.679	0.008	2.086	0.510
	15.322	0.943	0.000	0.889	0.738	0.006	1.956	0.492
	15.954	0.916	0.135	1.285	0.459	0.004	1.881	0.581
	6.218	4.347	0.469	1.192	0.633	0.003	1.485	0.705
	9.173	2.896	0.824	0.954	0.820	0.000	1.259	0.519

(In Times)								
Period	SMS Pharmaceuticals Ltd.	Strides Shasun Ltd.	Sequent Scientific Ltd.	Sri Krishna Pharmaceuticals Ltd.	Makers Labs Ltd.	Abbott India Ltd.	Aarti Drugs Ltd.	IPCA Labs. Ltd.
Mean	11.858	1.998	0.286	1.100	0.666	0.004	1.734	0.561
SD	4.135	1.568	0.357	0.169	0.135	0.003	0.347	0.087
CV (%)	34.867	78.478	124.951	15.381	20.276	70.066	20.037	15.504
After Merger	13.697	1.328	1.180	0.954	0.537	0.000	1.416	0.503
	16.298	0.884	1.396	1.295	0.404	0.000	1.544	0.476
	16.589	0.658	1.753	1.303	0.197	0.000	1.424	0.393
	17.919	0.463	2.423	1.198	0.093	0.000	1.364	0.300
	13.092	0.290	6.961	1.198	0.032	0.000	1.326	0.416
Mean	15.519	0.724	2.742	1.189	0.253	0.000	1.415	0.418
SD	2.045	0.404	2.405	0.141	0.213	0.000	0.083	0.079
CV (%)	13.176	55.715	87.687	11.885	84.162	-	5.833	18.977
Paired 't'	1.747	1.521	2.645	0.831	3.629	3.096	2.447	1.967
'p' Value	0.155 ^{NS}	0.203 ^{NS}	0.057 ^{NS}	0.453 ^{NS}	0.022**	0.036**	0.071 ^{NS}	0.121 ^{NS}

Source: Annual Reports of the respected companies. Note: *-Sig. at 1% level; **-Sig. at 5% level; NS-Not Significant.

It is highlighted from Table 2 that the mean value of the debt-equity ratio before the merger period endowed by 11.858 in SMS Pharmaceuticals, followed by 1.998 in Strides Shasun, 0.286 in Sequent Scientific Limited, 1.100 in Sri Krishna Pharmaceuticals Limited, 0.666 in Makers labs, 0.004 in Abbott India, 1.734 in Aarti Drugs and 0.561 in IPCA Labs limited. The coefficient of variation of debt-equity ratio endowed by 34.867 per cent in SMS Pharmaceuticals, followed by 78.478 per cent in Strides Shasun limited, 124.951 per cent in Sequent Scientific limited, 15.381 per cent in Sri Krishna Pharmaceuticals Limited, 20.276 per cent in Makers labs limited, 70.066 per cent in Abbott India Limited, 20.037 per cent in Aarti Drugs limited and 15.504 per cent in IPCA labs limited. The table shows that the debt-equity ratio in Sri Krishna Pharmaceuticals Limited is constant, and on the other hand, it is erratic in Sequent Scientific limited.

It is evaluated from the mean value of debt equity ratio after the merger period endowed by 15.519 in SMS Pharmaceuticals Limited, followed by 0.724 in Strides Shasun limited, 2.742 in Sequent Scientific Limited, 1.189 in Sri Krishna Pharmaceuticals Limited, 0.253 in Makers labs, 0.000 in Abbott India, 1.415 in Aarti Drugs limited and 0.418 in IPCA Labs limited. The coefficient of variation of the debt-equity ratio endowed by 13.176 per cent in SMS Pharmaceuticals, followed by 55.715 per cent in Strides Shasun limited 87.687 per cent in Sequent Scientific limited, 11.885 per cent in Sri Krishna

Pharmaceuticals Limited, 84.162 per cent in Makers labs, 0.000 per cent in Abbott India, 5.833 per cent in Aarti Drugs limited and 18.977 per cent in IPCA labs limited. The table shows that the debt-equity ratio in Abbott India Limited is constant, and on the other hand, it is fickle in SMS Pharmaceuticals limited.

The result of paired t-test shows the null hypothesis of the companies SMS Pharmaceuticals Ltd., Strides Shasun Ltd., Sequent Scientific Ltd., Sri Krishna Pharmaceuticals Ltd., Aarti Drugs Ltd, and IPCA Labs. Ltd. are accepted. On the other hand, the null hypothesis of the companies Makers Labs Ltd. and Abbott India Ltd. are rejected. Hence, it is noted that there is no significant difference between the before and after the merger period of the companies SMS Pharmaceuticals Ltd., Strides Shasun Ltd., and Sequent Scientific Ltd., Sri Krishna Pharmaceuticals Ltd., Aarti Drugs Ltd., and IPCA Labs. Ltd., and on the other hand, there is a significant difference between the before and after merger periods of the companies Makers Labs Ltd. and Abbott India Ltd. in its debt-equity ratio.

It is found that SMS Pharmaceuticals Limited has the highest mean value, Abbott India Limited has less consistent in the debt-equity ratio, and the coefficient variation of the debt-equity ratio in Sri Krishna Pharmaceuticals Limited is constant, and on the other hand, it is erratic in Sequent Scientific limited in before merger period. On the other hand, SMS Pharmaceuticals Limited has the highest mean value, and Abbott India limited has the low volatility in

the debt-equity ratio. The coefficient variation of Abbott India Limited is constant. On the other hand, it is fickle in SMS Pharmaceuticals limited after the merger period is moderate during the study period. Further, there is a significant difference between the before and after merger periods of the companies Makers Labs Ltd. and Abbott India Ltd. in its debt-equity ratio.

Profitability Ratios

Net Profit Ratio

This ratio is also called the net profit to sales ratio. It is a measure of management's efficiency in operating the

business successfully from the owner's point of view. It indicates the return on shareholders' investments. The higher the ratio better is the operational efficiency of the business concern. Net profit includes non-operating incomes and profits. Similarly, net profit is the profit after reducing non-operating expenses; provision for tax is also subtracted while determining net profit.

$$\text{Net Profit Ratio} = \frac{\text{Net Profit after Tax}}{\text{Net Sales}} * 100$$

H₀: There is no significant difference in net profit ratio between before and after merger period of the selected companies.

Table 3: Net Profit Ratio

(In Percentage)								
Period	SMS Pharmaceuticals Ltd.	Strides Shasun Ltd.	Sequent Scientific Ltd.	Sri Krishna Pharmaceuticals Ltd.	Makers Labs Ltd.	Abbott India Ltd.	Aarti Drugs Ltd.	IPCA Labs. Ltd.
Before Merger	6.24	9.81	12.05	2.28	0.65	11.65	5.20	8.31
	7.58	14.49	12.49	2.91	1.86	11.21	4.62	12.95
	6.92	7.95	20.75	1.69	-0.42	10.99	4.21	13.18
	12.15	-27.90	3.01	5.48	5.43	9.04	4.00	7.05
	11.46	1.03	3.32	6.59	5.81	9.76	5.67	13.23
Mean	8.869	1.077	10.324	3.790	2.667	10.530	4.739	10.946
SD	2.732	16.908	7.397	2.133	2.818	1.092	0.694	3.014
CV (%)	30.808	1569.90	71.647	56.275	105.660	10.367	14.654	27.538
After Merger	2.52	13.73	8.44	6.59	6.40	5.88	4.53	13.58
	1.08	14.60	5.73	2.11	-0.91	8.08	3.41	12.03
	3.71	15.73	0.44	5.55	3.96	8.76	5.48	11.93
	0.53	7.86	-23.12	5.17	0.88	8.72	6.35	14.76
	10.45	330.21	-33.56	5.17	3.62	10.00	7.14	8.30
Mean	3.658	76.427	-8.412	4.918	2.790	8.287	5.380	12.118
SD	3.995	141.901	18.781	1.674	2.850	1.517	1.472	2.434
CV (%)	109.214	185.67	-223.257	34.042	102.142	18.306	27.353	20.088
Paired 't' Test	2.856	1.182	3.043	0.923	0.060	2.087	0.949	0.508
'p' Value	0.046**	0.303 ^{NS}	0.038**	0.408 ^{NS}	0.955 ^{NS}	0.105 ^{NS}	0.396 ^{NS}	0.638 ^{NS}

Source: Annual Reports of the respected companies. Note: *-Sig. at 1% level; **-Sig. at 5% level; NS-Not Significant.

It is surmised from Table 3 that the mean value of the net profit ratio before the merger period endowed by 8.869 in SMS Pharmaceuticals, followed by 1.077 in Strides

Shasun limited, 10.324 in Sequent Scientific Limited, 3.790 in Sri Krishna Pharmaceuticals Limited, 2.667 in Makers labs, 10.530 in Abbott India, 4.739 in Aarti Drugs

limited and 10.946 in IPCA Labs limited. The coefficient of variation of net profit ratio endowed by 30.808 per cent in SMS Pharmaceuticals Limited, followed by 1569.90 per cent in Strides Shasun limited, 71.647 per cent in Sequent Scientific limited, 56.275 per cent in Sri Krishna Pharmaceuticals Limited, 105.660 per cent in Makers labs limited, 10.367 per cent in Abbott India Limited, 14.654 per cent in Aarti Drugs limited and 27.538 per cent in IPCA labs limited. The table shows that the net profit ratio in Abbott India is constant, and on the other hand, it is fickle in Strides Shasun limited.

It is found from the mean value of net profit ratio after the merger period endowed by 3.658 in SMS Pharmaceuticals Limited, followed by 76.427 in Strides Shasun limited, 8.412 in Sequent Scientific Limited, 4.918 in Sri Krishna Pharmaceuticals Limited, 2.790 in Makers labs, 8.287 in Abbott India, 5.380 in Aarti Drugs limited and 12.118 in IPCA Labs limited. The coefficient of variation of net profit ratio endowed by 109.214 per cent in SMS Pharmaceuticals, followed by 185.67 per cent in Strides Shasun limited -223.257 per cent in Sequent Scientific limited, 34.042 per cent in Sri Krishna Pharmaceuticals Limited, 102.142 per cent in Makers labs, 18.306 per cent in Abbott India, 27.353 per cent in Aarti Drugs limited and 20.088 per cent in IPCA Labs limited. The table shows that the net profit ratio in Sequent Scientific Limited is constant, and on the other hand, it is fickle in Strides Shasun.

The result of paired t-test shows that the null hypothesis of the selected companies, except SMS Pharmaceuticals Ltd. and Sequent Scientific Ltd., are accepted. On the other hand, the null hypothesis of the companies SMS Pharmaceuticals Ltd. and Sequent Scientific Ltd. are rejected. Hence, it is evaluated that there is no significant difference between the before and after merger period of the selected all companies except SMS Pharmaceuticals Ltd. and Sequent Scientific Ltd. on the other hand, there is a significant difference between the before and after merger period of the companies SMS Pharmaceuticals Ltd. and Sequent Scientific Ltd. in its net profit ratio.

It is examined from the IPCA labs limited has the highest mean value, and Strides Shasun Limited has less consistent in the net profit ratio, and the coefficient variation of Abbott India is constant on the other hand, it is fickle in Strides Shasun limited in before merger

period. On the other hand, Strides Shasun Limited has the highest mean value, and Sequent Scientific Limited has the low volatility in the net profit ratio. The coefficient variation of Sequent Scientific Limited is constant, and on the other hand, it is fickle in Strides Shasun after the merger period during the study period. Further, there is a significant difference between the before and after merger period of the companies SMS Pharmaceuticals Ltd. and Sequent Scientific Ltd. in its net profit ratio.

Conclusion

From the analysis, it is clear that in the post-acquisition period, the increase in borrowed funds and improvement in the liquidity position of pharmaceutical companies indicate that long-term borrowings are deployed for working capital purposes. So, the managements have to find ways to use resources properly so as to enhance them efficiently in the post-acquisition period. The debt-equity ratio of SMS Pharmaceuticals Ltd., Sequent Scientific Ltd. and Sri Krishna Pharmaceuticals Ltd. is higher in the post-merger years when compared with the pre-merger period. So, it is recommended to these companies that they have to concentrate on reducing debt in proportion to equity. Shares may be issued to increase the share capital and also maintain the leverage position of the companies. In the post-acquisition period, the improved profitability position indicates that the managements have to come up with very fast to initiative some solid measures to improve efficiency and exploit the available opportunities of the economy of scale, which will definitely help the company to retain and uplift the profitability of the acquiring companies and enhance the value further from the perception of the shareholders.

References

- Oloye, M. I., & Osuma, G. (2015). Impacts of mergers and acquisition on the performance of Nigerian Banks (a case study of selected banks). *Pyrex Journal of Business and Finance Management Research*, 1(4), 23-40.
- Duggal, N. (2015). Mergers and acquisitions in India: A case study on Indian banking sector. *International Journal of Research and Development - A Management Review*, 4(2), 78-83.
- Long, P. H. (2015). Merger and acquisitions in the Czech banking sector-impact of bank mergers

- on the efficiency of banks. *Journal of Advanced Management Science*, 3(2), 86-92.
- Bassi, P., & Gupta, V. (2015). A study on impact of announcement of merger and acquisition on the valuation of the companies (with special reference to banks). *Asia Pacific Journal of Research*, 1(21), 1-13.
- Rooplata, P., & Sathya, R. (2015). Analysing premerger and post-merger financial performance: Merger and acquisition between Centurion bank of Punjab and HDFC. *Advances in Economics and Business Management*, 2(11), 1112-1116.
- Tang, A. C. (2015). Mergers and acquisitions and its effects on firm performance: A new look. *Proceedings of the DLSU Research Congress*, 3, 1-7.
- Chaudary, S., & Sarwar, A. (2015). Returns to shareholders in acquisitions into the U. S. pharmaceutical companies. *International Journal of Health and Economic Development*, 1(2), 14-27.
- Sahu, S. K., & Agarwal, N. (2015). Mergers and Acquisitions in the Indian Pharmaceutical Sector. Working Papers 2015-122, Madras School of Economics, Chennai, India.
- Retrieved from <https://www.ibef.org/industry/pharmaceutical-india.aspx>
- Retrieved from https://www.yesbank.in/pdf/the_indian_pharmaceutical_industry_changing_dynamics.pdf
- Aruna, G., & Nirmala, S. (2013). Financial performance of mergers and acquisitions of select banks in India. *International Research Journal of Business and Management*, 1, 90-102.
- Christopher, D., & Arishma. (2013). Pharmaceutical mergers and acquisitions. *International Journal of Advanced Research*, 1(5), 119-130.
- Gupta, S. P. (2000). *Statistical methods*. New Delhi: Sultan Chand and Sons.
- Ferguson, S. (n.d.). *Financial analysis of M&A integration*. New Delhi: MC-Grew Hill.