

PRE & POST MERGER & ACQUISITIONS (M&A) PERFORMANCE OF SELECTED COMPANIES

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Abstract

This study is mainly focus on pre and post-merger and acquisition of companies and their performance before five years of M&A and after five years of the M&A. this will helpful to entrepreneur to take decision in future that what kind of thing to be done first for M&A process of their companies or businesses. **The Problem Area:** In present scenario many merger and takeover took places specially in IT companies. To provide them authentic/statistical information about positive or negative changes in market this study is important. It is very hard for all the stake holder to judge the co. performance from all angle. And statistics give us spectra analysis. **Research Gap:** This type of study till date not done by anyone in the area of pre and post-merger performance of various selected co **Significances of the Study:** To know the co. performance is as same as before merger and after merger or any kind of positive or negative changes happened statically. **Objectives of the Study:** To know the pre and post-merger performance of selected co. on the bases of authentic data collection and suitable statistical analysis of ten years. **Sample Design:** 15 companies taken for study purpose by using convenient sample methods in descriptive type of research design. Special five years' performance before merger and five years' performance after merger. **Usefulness:** Students, research scholars, and other stake holders also get right information and benefits through this paper.

Keywords: Merger, Acquisition, Amalgamation, Pre, Post, IT Industries, Performance, Statistics Ratios.

1. INTRODUCTION

In today's era of liberalization, privatization and globalization, to get competitive advantages, efficiency, value creation have become the buzzwords for corporate around the world. To remain competitive and to grow profitability, the companies are gradually using the routes of merger and acquisition. The major objective of merger and acquisition are "Increase market share, cost reduction, talent sharing, globalize the business in short span of time, Tax benefits etc. There are various types of merger such as conglomerate merger, horizontal merger, vertical merger, reverse merger, product/market extension merger etc. let's understand this topic on the base of few reviews of literature.

2. REVIEW LITERATURE

Borodin, A., Sayabek, Z. S., Islyam, G., & Panaedova, G. (2020), in their paper "Impact of mergers and acquisitions on companies' financial performance" evaluates the impact of M&A transactions on the financial performance of US and European firms. They have taken sample of 138 M&A transactions that took place in these two regions between 2016 to 2018. The study compares regression analysis and two Student's t-tests based on sample of 138 mergers and acquisitions (M&A) happened in selected period. The outcomes of the tests created have

confirmed that in both regions, corporate that were successful before to M&A transactions continued to do well financially after the transactions. However, with the adoption of mergers and acquisitions, these firms' Return on Sales (ROS) significantly declined. Study also concludes that use of the "cash" method leads to a better Return on Sales than "mixed" or "stock" financing method.

Mahesh, R., & Prasad, D. (2012), in their research "Post-Merger & Acquisition financial performance analysis of selected Indian airline companies" studied on the performance of Indian Airline Companies after the consolidation of Airline sector in year 2007-08. This paper's primary goal is to evaluate post-merger & acquisition financial performance, efficiency, profitability, debt, liquidity of the merged entity. Pre and post 2 years financial performance analysed using a paired sample t-test. They have selected a sample of three companies from Indian Airline companies. The outcome of this research shows that there is no progress in merged entities return on equity, earning per share, net profit margin, interest coverage, and dividend per share post M&A.

Yadong, C., Lee, L. C., Kee, P. L., & Quah, K. (2019), In their paper "The impact of merger and acquisition on financial performance of listed companies in china" they use panel data regression to analyse 434 listed Chinese companies completed M&A activities during the year 2012 to 2016. The evidence shows that, typically performance of the firm improved after the M&A activities. They divide all sample corporate into three different types of M&A i.e. Horizontal, Vertical & Conglomerate M&A. to find out the best conclusion, paper tested the four hypothesis. The results show that when other conditions are unchanged, horizontal and conglomerate M&A are positively correlated to firm performance. The findings imply that horizontal M&A can benefit corporate through operational economies of scale, while conglomerate M&A improve firm financial performance.

Beverly, C., Sutejo, B. S., & Murhadi, W. R. (2019), In their study "Company performance before and after a merger" compare the financial performance of non-finance firms listed on the Indo-nesia Stock Exchange for the period 2010 to 2014 before and after M&A. they use 14 major ratios related to efficiency, profitability, leverage, and liquidity. T-test and Wilcoxon test method used in testing the data. Total 29 companies sample taken for the analysts the result. Study conclude that Profitability ratios and debt ratios demonstrate improved financial performance following mergers and acquisitions (M&A) compared to prior M&A. However, the performance of expenses, activities, and liquidity ratios were not good after mergers and acquisitions (M&A) although the overall financial performance improved after the merging and acquisitions (M&A)

3. RESEARCH METHODOLOGY

The Problem Area: In present scenario many merger and takeover took places specially in IT companies. To provide them authentic/ statistical information about positive or negative changes in market this study is important. It is very hard for all the stake holder to judge the co. performance from all angle. And statistics give us spectra analysis. This paper is focus on the same.

Research Gap: This type of study till date not done by anyone in the area of pre and post-merger performance of various selected co

Significances of the Study: To know the co. performance is sas same as before merger and after merger or any kind of positive or negative changes happened statically.

Objectives of the Study: To know the pre and post-merger performance of selected co. on the bases of authentic data collection and suitable statistical analysis of ten years.

Research Design: Descriptive type research

Universe of the Study and Sample Design: 15 companies taken for study purpose. Special five years' performance before merger and five years' performance after merger.

Collection of Data: Data collected through secondary sources of selected companies from its websites and annual reports.

Sample collection: Convenient Sampling method

Statistical Test: Researcher have parametric data so, here as per suitability of collected data the Paired t-Test is applied on it for hypotheses testing

A paired t-test (also known as a dependent or correlated t-test) is a statistical test that compares the averages/means and standard deviations of two related groups to determine if there is a significant difference between the two groups.

- A significant difference occurs when the differences between groups are unlikely to be due to sampling error or chance.
- The groups can be related by being the same group of people, the same item, or being subjected to the same conditions.

For example, let us assume two paired sets, such as X_i and Y_i for $i=1,2,\dots, n=1,2,\dots$, such that their paired difference is independent which is identically and normally distributed. Then the paired t-test concludes whether they notably vary from each other.

Hypotheses

A researcher takes the help of hypothesis for achieving the objectives. Hence, he constructs the hypothesis. -According to Kerlinger (1996),

Hypotheses of a Paired T-Test:

There are two possible hypotheses in a paired t-test.

- The **null hypothesis** (H_0) states that there is no significant difference between the means of the two groups. i.e. pre-merger and post-merger
- The **alternative hypothesis** (H_1) states that there is a significant difference between the two population means, and that this difference is unlikely to be caused by sampling error or chance.

Formula

Paired T-test Formula

$$t = \frac{\sum d}{\sqrt{\frac{n(\sum d^2) - (\sum d)^2}{n-1}}}$$

where d: difference per paired value
n: number of samples

- The data is taken from subjects who have been measured twice.
- 95% confidence interval is obtained from the difference between the two sets of joined observations.

Tools for Analysis

Ratios and percentages will be used for the analysis of data and for better understanding, Bar Diagrams will be used for the presentation of the data. To test the hypothesis, 't' test will be employed. The performance of the company before and after the merger and acquisition will be compared.

Limitations of Study

- The period of pre and post M & A data analysis will be limited to 5 years
- The study will be based on secondary data hence; all the limitations pertaining to secondary data will apply to the study.

4. DATA ANALYSIS

Here, various data collected through secondary sources and required all ratios calculated. All data tabulated in before and after 5 years of performance its mean all pre and post years' performance calculated then suitable statistical test applied for hypothesis testing.

Analysis of ratios

1. EBIT to Sales Ratio

Usefulness: to know the profitability of the business

Formula:

$$\frac{\text{Quick Asset}}{\text{Current Liabilities}}$$

Here,

Quick Asset: Cash, Bill receivable

Current Liabilities: bills payable

Hypotheses

1H₀: There is no significant difference in the before and after Merger & Acquisition performance's mean of EBIT to Sales Ratio of selected companies.

1H₁: There is a significant difference in the before and after Merger & Acquisition performance's mean of EBIT to Sales Ratio of selected companies.

Table No 1: EBIT to Sales Ratio

Sr. No.	Name of Company	Pre- Merger & Acquisition Ratio (%)						Post-Merger & Acquisition Ratio (%)					
		Before 5 Years						After 5 Years					
		5	4	3	2	1	Mean	1	2	3	4	5	Mean
1	HCL Tech Ltd.	14.59	16.09	21.01	24.98	25.08	20.35	22.34	21.91	21.17	20.49	21.70	21.52
2	Infosys Ltd.	34.94	33.90	34.68	31.71	29.37	32.92	30.01	29.17	28.84	25.45	24.42	27.58
3	Persistent Systems Ltd.	19.37	19.68	20.31	20.53	20.63	20.10	14.31	14.15	14.45	12.86	14.69	14.09
4	Tech Mahindra Ltd.	25.15	22.12	19.23	15.59	16.72	19.76	16.12	14.91	13.67	16.38	16.52	15.52
5	Wipro Ltd.	19.69	21.79	24.17	24.65	23.51	22.76	19.86	20.81	21.23	23.24	19.75	20.98
6	Adani Port Ltd.	60.77	58.53	50.81	62.03	61.25	58.68	58.66	66.02	60.80	60.23	51.55	59.45
7	Adani Power Ltd.	49.17	22.81	-2.06	16.75	19.03	21.14	16.32	16.86	19.60	15.31	28.20	19.26
8	Birla Corp. Ltd.	17.45	15.99	8.25	9.47	9.16	12.06	9.59	10.51	15.46	15.72	10.88	12.43
9	Havells Ltd.	8.18	8.16	7.39	9.85	13.58	9.43	11.52	9.79	14.44	11.91	8.76	11.28
10	JK Tyre Ltd.	3.05	7.14	9.28	10.70	13.84	8.80	7.06	8.49	7.31	10.58	6.05	7.90
11	Lupin Ltd.	17.68	17.39	20.39	25.32	26.82	21.52	21.12	14.02	12.95	12.18	11.98	14.45
12	Rajesh Export Ltd.	2.12	3.12	2.54	2.63	2.39	2.56	0.72	1.00	1.02	0.76	0.40	0.78
13	Sun Pharma Ltd.	34.63	36.89	42.21	43.79	44.43	40.39	28.04	29.92	18.68	19.20	16.97	22.56
14	UltraTech Ltd.	19.32	14.86	14.67	14.64	17.78	16.26	13.61	17.16	21.47	17.70	13.02	16.59
15	Bridgepoint group	19.70	21.80	24.18	24.65	23.56	22.78	19.87	20.81	21.23	23.25	19.75	20.98

Source: Annual Reports of the selected co. and published on Website of the co.

Test Calculation table: t test Paired Observations:

(Before 5 years of merger & after 5 Years of merger)

Value	Particular
0.0000000	hypothesized value
21.9673963	mean Mean
19.0250560	mean Mean
2.9423403	mean difference (Mean - Mean)
4.9299037	std. dev.
1.2728957	std. error
15	n
14	df
2.312	t
.0365	p-value (two-tailed)

(Source of table: Megastat software)

Test value < p Value

0.0365 < 0.05

Calculated test value is less than p value hence,

Result of Hypothesis testing

H_0 = Rejected

H_1 = Accepted

2. Net Profit Ratio

Usefulness: This ratio is helpful to the shareholders and investor for understanding the net profitability of the company.

Formula:

$$\text{N.P. Ratio} = \frac{\text{Net Profit}}{\text{Net Sales}} \times 100$$

Here,

Net Profit = Profit after Tax (PAT) (EBIT- Interest-Income Tax)

Net Sales = Total Sales – Sales Return if any

Hypothesis Testing

Here researcher is comparing before and after merger 5 years' performance (10 years) for that paired t test is suitable statistical test is applied.

Hypotheses

$2H_0$: There is no significant difference in the before and after Merger & Acquisition performance's mean of Net Profit Ratios of selected companies.

$2H_1$: There is a significant difference in the before and after Merger & Acquisition performance's mean of Net profit Ratios of selected companies.

Table no 2: Net Profit Ratio

Sr. No.	Name of Company	Pre- Merger & Acquisition Ratio (%)						Post-Merger & Acquisition Ratio (%)					
		Before 5 Years						After 5 Years					
		5	4	3	2	1	Mean	1	2	3	4	5	Mean
1	HCL Tech Ltd.	10.46	11.63	15.79	20.25	19.93	15.61	18.09	17.24	16.74	15.64	14.78	16.50
2	Infosys Ltd.	27.55	24.85	24.69	23.36	21.25	24.34	21.60	20.95	22.72	18.63	18.27	20.43
3	Persistent Systems Ltd.	18.01	14.17	14.49	14.93	15.36	15.39	10.47	10.64	10.44	9.54	10.76	10.37
4	Tech Mahindra Ltd.	22.72	15.14	12.53	19.95	18.73	17.81	11.61	11.29	9.65	12.34	12.37	11.45
5	Wipro Ltd.	15.07	16.43	18.30	18.44	17.38	17.12	14.68	15.25	15.90	17.43	15.41	15.73
6	Adani Port Ltd.	45.20	45.90	33.69	45.38	36.06	41.25	39.52	46.35	32.44	36.52	31.69	37.31
7	Adani Power Ltd.	24.03	-7.20	-33.85	-1.84	-4.33	-4.64	-27.10	-10.14	-4.12	-8.59	4.84	-9.02
8	Birla Corp. Ltd.	10.47	10.38	4.30	5.46	4.81	7.08	2.68	3.90	7.30	9.29	5.34	5.70
9	Havells Ltd.	8.02	5.45	4.50	15.67	8.03	8.33	7.80	7.79	9.99	8.58	6.34	8.10
10	JK Tyre Ltd.	-0.46	2.91	3.44	4.46	6.67	3.40	0.80	1.70	1.73	3.51	1.75	1.90
11	Lupin Ltd.	14.82	12.25	13.63	16.27	18.82	15.16	14.62	1.59	3.63	-1.75	8.02	5.22
12	Rajesh Export Ltd.	1.21	1.61	1.46	1.22	1.30	1.36	0.51	0.67	0.74	0.62	0.33	0.57
13	Sun Pharma Ltd.	32.93	31.71	33.13	26.40	19.54	28.74	16.68	22.05	8.16	9.17	11.47	13.51
14	UltraTech Ltd.	12.56	10.19	8.62	8.95	10.70	10.20	6.51	13.80	12.21	13.66	8.01	10.84
15	Bridgepoint group	15.07	16.43	18.30	18.45	17.48	17.15	14.69	15.26	15.90	17.43	15.42	15.74

Source: Annual Reports of the selected co. and published on Website of the co.

Test Calculation table: t test Paired Observations:

(Before 5 years of merger & after 5 Years of merger)

Value	Particular
0.0000000	hypothesized value
14.5548226	mean Mean
10.9568470	mean Mean
3.5979755	mean difference (Mean - Mean)
4.3284510	std. dev.
1.1176013	std. error
15	n
14	df
3.219	t
.0062	p-value (two-tailed)

(Source of table: Megastat software)

Test value < p Value

0.0062 < 0.05

Calculated test value is less then p value hence,

Result of Hypothesis testing

H₀ = Rejected

H₁ = Accepted

3. Return on Net worth Ratio

Usefulness: to know the profitability of business

Formula:

$$\frac{\text{PAT}}{\text{Shareholder's Fund}} \times 100$$

Here,

PAT = profit after tax

Shareholder's fund = equity and preference shares

Hypotheses

3H₀: There is no significant difference in the before and after Merger & Acquisition performance's mean of Return on Net worth Ratio Ratios of selected companies.

3H₁: There is a significant difference in the before and after Merger & Acquisition performance's mean of Return on Net worth Ratio Ratios of selected companies.

Table No 3: Return on Net worth Ratio

Sr. No.	Name of Company	Pre- Merger & Acquisition Ratio (%) Before 5 Years						Post-Merger & Acquisition Ratio (%) After 5 Years					
		5	4	3	2	1	Mean	1	2	3	4	5	Mean
1	HCL Tech Ltd.	21.51	24.63	30.70	33.31	30.20	28.07	26.11	23.96	24.46	21.56	18.60	22.94
2	Infosys Ltd.	27.18	26.31	26.59	24.81	23.92	25.76	21.84	20.80	24.68	23.71	25.35	23.28
3	Persistent Systems Ltd.	18.70	16.86	18.42	20.39	20.67	19.01	15.87	15.18	14.99	14.26	16.12	15.28
4	Tech Mahindra Ltd.	52.21	24.26	19.22	27.04	23.73	29.29	21.45	20.51	17.11	20.16	21.18	20.08
5	Wipro Ltd.	20.74	23.15	24.73	23.34	19.30	22.25	16.69	15.95	17.57	19.66	18.69	17.71
6	Adani Port Ltd.	19.57	21.91	22.78	25.38	19.84	21.90	21.68	22.32	17.44	16.26	14.69	18.48
7	Adani Power Ltd.	8.16	-4.87	-53.45	-4.44	-14.25	-13.77	-205.83	-236.30	-16.07	-48.75	0.19	-101.35
8	Birla Corp. Ltd.	10.66	11.02	5.13	6.67	5.80	7.86	3.60	5.69	10.51	11.49	6.59	7.57
9	Havells Ltd.	40.32	26.79	21.20	47.26	15.08	30.13	18.62	17.06	20.17	19.93	16.18	18.39
10	JK Tyre Ltd.	-4.24	22.43	24.25	23.53	26.53	18.50	3.37	7.72	6.47	11.95	7.37	7.37
11	Lupin Ltd.	26.29	21.62	25.25	26.49	27.08	25.35	18.95	1.85	4.41	-2.15	8.81	6.38
12	Rajesh Export Ltd.	15.53	20.74	18.74	13.03	19.48	17.51	21.14	17.64	14.62	11.45	7.53	14.47
13	Sun Pharma Ltd.	17.26	19.15	21.71	19.90	16.96	19.00	15.02	19.01	5.67	6.44	8.32	10.89
14	UltraTech Ltd.	17.58	12.84	11.02	10.86	11.13	12.69	8.58	14.87	12.37	14.24	9.32	11.88
15	Bridgepoint group	20.74	23.15	24.74	23.35	20.05	22.41	16.70	15.96	17.57	19.67	18.70	17.72

Source: Annual Reports of the selected co. and published on Website of the co.

Test Calculation table: t test Paired Observations:

(Before 5 years of merger & after 5 Years of merger)

Value	Particular
0.0000000	hypothesized value
19.0624788	mean Mean
7.4062613	mean Mean
11.6562175	mean difference (Mean - Mean)
21.5719670	std. dev.
5.5698579	std. error
15	n
14	df
2.093	t
.0551	p-value (two-tailed)

(Source of table: Megastat software)

Test value > p Value

0.0551 > 0.05

Calculated test value is greater than p value hence,

Result of Hypothesis testing

H₀ = Accepted

H₁ = Rejected

4. Return on Capital Employed Ratio:

Usefulness: This ratio is useful to know the profitability of Co. or business

Formula:

$$\frac{\text{EBIT}}{\text{Capital Employed}} \times 100$$

Here,

EBIT=Earnings before interest and tax

Capital employed = Share capital + reserve

Hypotheses

4H0: There is no significant difference in the before and after Merger & Acquisition performance's mean of Return on Capital Employed Ratio of selected companies.

4H1: There is a significant difference in the before and after Merger & Acquisition performance's mean of Return on Capital Employed Ratio of selected companies.

Table no 4: Return on Capital Employed Ratio

Sr. No.	Name of Company	Pre- Merger & Acquisition Ratio (%) Before 5 Years						Post-Merger & Acquisition Ratio (%) After 5 Years					
		5	4	3	2	1	Mean	1	2	3	4	5	Mean
1	HCL Tech Ltd.	16.73	20.41	27.06	31.38	28.92	24.90	30.87	29.22	27.65	24.47	23.78	27.20
2	Infosys Ltd.	26.91	26.21	26.48	24.66	23.71	25.59	21.71	28.81	30.92	31.83	30.83	28.82
3	Persistent Systems Ltd.	18.34	16.71	17.31	19.70	20.46	18.50	15.62	14.87	20.52	18.76	21.24	18.20
4	Tech Mahindra Ltd.	51.90	15.16	14.17	20.79	20.55	24.51	18.58	17.72	20.25	22.38	24.83	20.75
5	Wipro Ltd.	18.82	22.67	23.31	22.24	17.75	20.96	19.91	19.97	21.76	24.10	20.43	21.23
6	Adani Port Ltd.	11.13	13.24	7.32	12.30	13.44	11.49	13.55	15.05	15.89	14.25	11.23	13.99
7	Adani Power Ltd.	3.32	2.45	-0.36	6.53	8.73	4.13	8.11	8.38	9.39	7.13	12.31	9.06
8	Birla Corp. Ltd.	11.77	10.81	6.25	6.97	7.19	8.60	5.80	7.21	10.61	9.81	6.93	8.07
9	Havells Ltd.	22.85	23.42	24.90	28.56	23.26	24.60	25.05	19.47	24.86	24.09	20.22	22.74
10	JK Tyre Ltd.	8.75	18.11	23.65	21.73	23.31	19.11	9.58	13.19	9.73	14.12	10.90	11.50
11	Lupin Ltd.	26.35	25.40	33.28	37.73	36.40	31.83	18.04	10.45	9.92	11.88	11.97	12.45
12	Rajesh Export Ltd.	27.18	40.11	32.57	27.92	35.74	32.70	27.25	25.02	19.73	13.94	9.16	19.02
13	Sun Pharma Ltd.	17.35	19.86	24.43	27.89	30.56	24.02	19.35	21.71	11.13	11.78	10.61	14.92
14	UltraTech Ltd.	18.29	12.54	13.21	12.79	13.31	14.03	9.84	11.44	14.58	14.62	12.12	12.52
15	Bridgepoint group	24.61	30.08	30.82	29.73	25.42	28.13	19.92	19.98	21.77	24.11	20.43	21.24

Source: Annual Reports of the selected co. and published on Website of the co.

Test Calculation table: t test Paired Observations:
(Before 5 years of merger & after 5 Years of merger)

Value	Particular
0.0000000	hypothesized value
20.8738918	mean Mean
17.4483667	mean Mean
3.4255250	mean difference (Mean - Mean)
6.7688558	std. dev.
1.7477110	std. error
15	n
14	df
1.960	t
.0702	p-value (two-tailed)

(Source of table: Megastat software)

Test value > p Value

0.0702 > 0.05

Calculated test value is greater than p value hence,

Result of Hypothesis testing

H₀ = Accepted

H₁ = Rejected

5. Return on Assets Ratio

Usefulness: To know the profitability of business or co.

Formula:

$$\frac{\text{EBIT}}{\text{Total Assets}} \times 100$$

Here

EBIT = Earnings before interest and tax

Total Assets = Fix and current assets

Hypotheses

5H₀: There is no significant difference in the before and after Merger & Acquisition performance's mean of Return on Assets Ratio of selected companies.

5H₁: There is a significant difference in the before and after Merger & Acquisition performance's mean of Return on Assets Ratio of selected companies.

Table No 5: Return on Assets Ratio

Sr. No.	Name of Company	Pre- Merger & Acquisition Ratio (%) Before 5 Years						Post-Merger & Acquisition Ratio (%) After 5 Years					
		5	4	3	2	1	Mean	1	2	3	4	5	Mean
1	HCL Tech Ltd.	11.84	13.24	18.03	21.71	20.76	17.12	18.80	18.16	17.27	13.33	12.93	16.10
2	Infosys Ltd.	22.59	21.84	21.72	20.35	18.70	21.04	17.90	17.21	20.06	18.17	17.88	18.24
3	Persistent Systems Ltd.	15.34	13.97	14.73	16.15	16.37	15.31	12.84	12.15	12.31	11.00	12.29	12.12
4	Tech Mahindra Ltd.	35.68	11.86	10.63	15.83	14.33	17.67	13.23	13.28	10.79	12.48	12.84	12.52
5	Wipro Ltd.	12.95	14.08	15.99	14.83	12.36	14.04	10.57	10.85	11.96	13.04	11.37	11.56
6	Adani Port Ltd.	10.43	12.29	6.41	10.53	11.97	10.33	10.81	12.78	14.53	11.64	9.84	11.92
7	Adani Power Ltd.	3.00	1.82	-0.25	4.50	6.13	3.04	5.20	5.00	6.88	5.40	9.42	6.38
8	Birla Corp. Ltd.	9.82	9.19	5.11	6.08	5.82	7.20	4.97	6.07	8.78	8.27	5.86	6.79
9	Havells Ltd.	13.25	12.52	13.10	18.34	16.17	14.68	16.18	13.06	17.06	15.77	13.27	15.07
10	JK Tyre Ltd.	4.12	8.97	11.75	11.44	13.10	9.88	5.52	7.78	5.65	8.76	5.92	6.73
11	Lupin Ltd.	16.80	15.52	22.05	28.01	26.07	21.69	13.89	8.42	7.75	7.49	7.70	9.05
12	Rajesh Export Ltd.	4.13	6.69	5.70	6.83	7.49	6.17	7.18	7.98	6.20	4.83	4.41	6.12
13	Sun Pharma Ltd.	15.66	17.02	20.55	23.70	24.33	20.25	14.62	15.38	7.69	8.62	8.17	10.90
14	UltraTech Ltd.	13.92	10.00	9.38	9.18	10.69	10.63	7.88	9.11	11.14	11.10	9.01	9.65
15	Bridgepoint group	16.93	18.68	21.13	19.83	17.07	18.73	14.30	14.81	15.97	17.40	14.57	15.41

Source: Annual Reports of the selected co. and published on Website of the co.

Test Calculation table: t test Paired Observations:

(Before 5 years of merger & after 5 Years of merger)

Value	Particular
0.0000000	hypothesized value
13.8511072	mean Mean
11.2374137	mean Mean
2.6136934	mean difference (Mean - Mean)
4.0736281	std. dev.
1.0518063	std. error
15	n
14	df
2.485	t
.0262	p-value (two-tailed)

(Source of table: Megastat software)

Test value < p Value

0.0062 < 0.05

Calculated test value is less then p value hence,

Result of Hypothesis testing

H₀ = Rejected

H₁ = Accepted

6. Total Debt- Equity Ratio

Usefulness: To know the proportion of long term liabilities in relation to owners' funds

Formula:

$$\frac{\text{Non-Current Liabilities}}{\text{Shareholder's Fund}}$$

Here

Non-current liabilities= long term liabilities / Debt

Shareholder's fund = equity and preference share

Hypotheses

- 6H0: There is no significant difference in the before and after Merger & Acquisition performance's mean of Total Debt- Equity Ratio of selected companies.
- 6H1: There is a significant difference in the before and after Merger & Acquisition performance's mean of Total Debt- Equity Ratio of selected companies.

Table no 6: Total Debt- Equity Ratio

Sr. No.	Name of Company	Pre- Merger & Acquisition Ratio (%)						Post-Merger & Acquisition Ratio (%)					
		Before 5 Years						After 5 Years					
		5	4	3	2	1	Mean	1	2	3	4	5	Mean
1	HCL Tech Ltd.	0.22	0.16	0.07	0.02	0.02	0.1	0.01	0.01	0.09	0.09	0.06	0.05
2	Infosys Ltd.	0	0	0	0	0	0	0	0	0	0	0	0
3	Persistent Systems Ltd.	0	0	0	0	0	0	0	0	0	0	0	0
4	Tech Mahindra Ltd.	0	0.47	0.35	0.28	0.2	0.26	0.06	0.07	0.07	0.09	0.07	0.07
5	Wipro Ltd.	0.21	0.16	0.16	0.21	0.26	0.2	0.26	0.17	0.11	0.12	0.23	0.18
6	Adani Port Ltd.	1.34	1.09	3.66	1.8	1.49	1.88	1.37	1.1	1.05	0.87	1.12	1.1
7	Adani Power Ltd.	3.95	5.2	8.13	5.18	6.17	5.73	14.29	45.9	6.5	9.1	4.54	16.07
8	Birla Corp. Ltd.	0.51	0.57	0.58	0.66	0.54	0.57	1.22	1.12	1.1	0.98	0.94	1.07
9	Havells Ltd.	0.8	0.71	0.4	0.04	0.04	0.4	0.1	0.1	0.17	0.15	0.11	0.13
10	JK Tyre Ltd.	2.2	2.04	1.77	1.59	1.36	1.79	2.04	1.86	1.77	1.51	1.3	1.7
11	Lupin Ltd.	0.17	0.19	0.12	0.08	0.06	0.13	0.52	0.56	0.58	0.25	0.1	0
12	Rajesh Export Ltd.	0	0	0	0	0	0	0.08	0.05	0.02	0.01	0.01	0.03
13	Sun Pharma Ltd.	0.02	0.03	0.04	0.07	0.16	0.06	0.17	0.08	0.06	0.06	0.08	0.09
14	UltraTech Ltd.	0.47	0.49	0.42	0.39	0.39	0.43	0.82	0.6	0.48	0.26	0.25	0.48
15	Bridgepoint group	0.1	0.02	0.06	0.05	0.06	0.05	0.13	0.09	0.07	0.09	0.17	0.11

Source : Annual Reports of the selected co. and published on Website of the co.

Test Calculation table: t test Paired Observations:

(Before 5 years of merger & after 5 Years of merger)

Value	Particular
0	hypothesized value
0.773434	mean Mean
1.432217	mean Mean
-0.65878	mean difference (Mean - Mean)
2.691769	std. dev.
0.695012	std. error
15	n
14	df
-0.948	t
0.3593	p-value (two-tailed)

(Source of table: Megastat software)

Test value > p Value

0.3593 > 0.05

Calculated test value is greater than p value hence,

Result of Hypothesis testing

H₀ = Accepted

H₁ = Rejected

7. Asset Turnover Ratio

Usefulness: to know the efficiency with which total assets are utilised in the business

Formula

$$\frac{\text{Net Sales or Revenue}}{\text{Total Assets}}$$

Here

Net Sales or Revenue = total sales revenue / income

Total Assets = fix and current Assets

Hypotheses

7H₀: There is no significant difference in the before and after Merger & Acquisition performance's mean of Asset Turnover Ratio of selected companies.

7H₁: There is a significant difference in the before and after Merger & Acquisition performance's mean of Asset Turnover Ratio of selected companies.

Table No 7: Asset Turnover Ratio

Sr. No.	Name of Company	Pre- Merger & Acquisition Ratio (%) Before 5 Years						Post-Merger & Acquisition Ratio (%) After 5 Years					
		5	4	3	2	1	Mean	1	2	3	4	5	Mean
1	HCL Tech Ltd.	113.2	113.9	114.2	107.2	104.1	110.5	103.9	105.3	103.2	85.2	87.5	97.0
2	Infosys Ltd.	82.0	87.9	87.9	87.1	88.0	86.6	82.9	82.2	88.3	97.6	97.9	89.7
3	Persistent Systems Ltd.	85.2	98.6	101.7	108.1	106.6	100.0	122.7	114.1	117.9	115.3	114.3	116.8
4	Tech Mahindra Ltd.	157.0	78.4	84.9	79.3	76.5	95.2	114.0	117.6	111.8	101.1	103.9	109.7
5	Wipro Ltd.	86.0	85.7	87.4	80.4	71.2	82.1	72.0	71.2	75.2	0.7	0.7	44.0
6	Adani Port Ltd.	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
7	Adani Power Ltd.	0.1	0.1	0.1	0.3	0.3	0.2	0.3	0.3	0.4	0.4	0.3	0.3
8	Birla Corp. Ltd.	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.5	0.5	0.5
9	Havells Ltd.	1.6	1.5	1.8	1.9	1.2	1.6	1.4	1.3	1.2	1.3	1.5	1.4
10	JK Tyre Ltd.	1.4	1.3	1.3	1.1	0.9	1.2	0.8	0.9	0.8	0.8	1.0	0.9
11	Lupin Ltd.	1.0	0.9	1.1	1.1	1.0	1.0	0.7	0.6	0.6	0.6	0.6	0.6
12	Rajesh Export Ltd.	1.9	2.1	2.2	2.6	3.1	2.4	10.0	8.0	6.1	6.4	11.0	8.3
13	Sun Pharma Ltd.	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5
14	UltraTech Ltd.	0.7	0.7	0.6	0.6	0.6	0.7	0.6	0.5	0.5	0.6	0.7	0.6
15	Bridgepoint group	0.9	0.9	0.9	0.8	0.7	0.8	0.7	0.7	0.8	0.7	0.7	0.7

Source : Annual Reports of the selected co. and published on Website of the co.

Test Calculation table: t test Paired Observations:

(Before 5 years of merger & after 5 Years of merger)

Value	Particular
0.0000000	hypothesized value
32.2402111	mean Mean
31.4147446	mean Mean
0.8254665	mean difference (Mean - Mean)
12.4342877	std. dev.
3.2105193	std. error
15	n
14	df
0.257	t
.8008	p-value (two-tailed)

(Source of table: Megastat software)

Test value > p Value

0.8008 > 0.05

Calculated test value is greater than p value hence,

Result of Hypothesis testing

H₀ = Accepted

H₁ = Rejected

8. Current Ratio

Usefulness: to know the liquid position or the working capital position of the business.

Formula:

$$\frac{\text{Current Asset}}{\text{Current Liabilities}}$$

Here,

Current Asset: Cash in hand, bank balance, Fix deposits, bills receivable

Current Liabilities: monthly payments

Hypotheses

8H0: There is no significant difference in the before and after Merger & Acquisition performance's mean of Current Ratio of selected companies.

8H1: There is a significant difference in the before and after Merger & Acquisition performance's mean of Current Ratio of selected companies.

Table no 8: Current Ratio

Sr. No.	Name of Company	Pre- Merger & Acquisition Ratio (%)						Post-Merger & Acquisition Ratio (%)					
		Before 5 Years						After 5 Years					
		5	4	3	2	1	Mean	1	2	3	4	5	Mean
1	HCL Tech Ltd.	1.64	1.41	1.69	2.09	2.32	1.83	2.33	2.43	2.42	1.62	2.48	2.26
2	Infosys Ltd.	4.09	4.59	4.38	4.36	3.58	4.20	3.91	3.83	3.55	2.84	2.62	3.35
3	Persistent Systems Ltd.	4.01	3.64	3.68	3.36	3.12	3.56	3.36	3.62	3.90	3.06	3.47	3.48
4	Tech Mahindra Ltd.	1.95	1.51	1.34	1.34	1.14	1.46	2.15	2.66	2.55	2.29	2.09	2.35
5	Wipro Ltd.	1.99	1.82	2.22	2.22	2.30	2.11	2.37	2.67	2.40	2.27	2.01	2.34
6	Adani Port Ltd.	0.20	0.10	0.08	0.24	0.22	0.17	0.17	0.27	0.30	0.26	0.24	0.25
7	Adani Power Ltd.	0.07	0.12	0.09	0.12	0.17	0.12	0.19	0.20	0.19	0.19	0.22	0.20
8	Birla Corp. Ltd.	0.42	0.33	0.47	0.47	0.50	0.44	0.22	0.22	0.22	0.21	0.21	0.22
9	Havells Ltd.	0.64	0.68	0.61	0.65	0.63	0.64	0.53	0.49	0.60	0.63	0.63	0.58
10	JK Tyre Ltd.	0.45	0.45	0.47	0.43	0.42	0.44	0.36	0.39	0.37	0.37	0.44	0.39
11	Lupin Ltd.	0.53	0.54	0.58	0.60	0.60	0.57	0.45	0.46	0.50	0.62	0.59	0.52
12	Rajesh Export Ltd.	0.99	0.99	0.99	0.99	0.98	0.99	0.91	0.90	0.91	0.87	0.89	0.90
13	Sun Pharma Ltd.	0.59	0.48	0.62	0.57	0.64	0.58	0.57	0.54	0.49	0.48	0.46	0.51
14	UltraTech Ltd.	0.28	0.30	0.23	0.24	0.32	0.27	0.18	0.18	0.27	0.21	0.23	0.21
15	Bridgepoint group.	0.62	0.69	0.70	0.74	0.71	0.69	0.67	0.69	0.64	0.63	0.58	0.64

Source : Annual Reports of the selected co. and published on Website of the co.

Test Calculation table: t test Paired Observations:

(Before 5 years of merger & after 5 Years of merger)

Value	Particular
0.0000000	hypothesized value
1.2042369	mean Mean
1.2125713	mean Mean
-0.0083344	mean difference (Mean - Mean)
0.3636814	std. dev.
0.0939021	std. error
15	n
14	df
-0.089	t
.9305	p-value (two-tailed)

(Source of table: Megastat software)

Test value > p Value

0.9305 > 0.05

Calculated test value is greater than p value hence,

Result of Hypothesis testing

H₀ = Accepted

H₁ = Rejected

9. Quick Ratio

Usefulness: to know whether the firm will be able to pay current liabilities immediately.

Formula:

$$\frac{\text{Liquid Asset}}{\text{Current Liabilities}}$$

Here

Liquid Assets: Cash

Current Liabilities: bill payable, daily or monthly payment

Hypotheses

9H₀: There is no significant difference in the before and after Merger & Acquisition performance's mean of Quick Ratio of selected companies.

9H₁: There is a significant difference in the before and after Merger & Acquisition performance's mean of Quick Ratio of selected companies.

Table no 9: Quick Ratio

Sr. No.	Name of Company	Pre- Merger & Acquisition Ratio (%) Before 5 Years						Post-Merger & Acquisition Ratio (%) After 5 Years					
		5	4	3	2	1	Mean	1	2	3	4	5	Mean
1	HCL Tech Ltd.	1.60	1.37	1.66	2.08	2.30	1.80	2.31	2.41	2.41	1.62	2.47	2.24
2	Infosys Ltd.	4.09	4.59	4.38	4.36	3.58	4.20	3.91	3.83	3.55	2.84	2.62	3.35
3	Persistent Systems Ltd.	4.01	3.64	3.68	3.36	3.12	3.56	3.36	3.62	3.90	3.06	3.47	3.48
4	Tech Mahindra Ltd.	1.95	1.51	1.34	1.34	1.14	1.46	2.14	2.65	2.54	2.28	2.08	2.34
5	Wipro Ltd.	1.91	1.80	2.21	2.20	2.28	2.08	2.35	2.65	2.39	2.27	2.01	2.33
6	Adani Port Ltd.	3.07	1.33	0.60	1.66	1.95	1.72	0.81	1.72	3.40	1.34	1.89	1.83
7	Adani Power Ltd.	0.68	0.39	0.22	0.32	0.49	0.42	0.46	0.47	0.66	0.66	0.83	0.62
8	Birla Corp. Ltd.	1.89	1.38	2.00	2.79	2.03	2.02	1.11	0.96	0.91	0.92	0.96	0.97
9	Havells Ltd.	0.83	0.85	0.70	1.25	1.45	1.02	0.75	0.68	0.97	1.00	0.87	0.86
10	JK Tyre Ltd.	0.57	0.55	0.63	0.64	0.68	0.61	0.52	0.59	0.55	0.55	0.52	0.55
11	Lupin Ltd.	0.91	0.83	1.06	1.51	1.43	1.15	1.36	1.68	1.63	1.30	1.17	1.43
12	Rajesh Export Ltd.	1.13	1.13	1.14	1.24	1.19	1.17	1.17	1.21	1.13	1.10	1.11	1.14
13	Sun Pharma Ltd.	4.89	2.55	3.13	2.94	2.60	3.22	1.84	1.46	1.25	1.34	1.51	1.48
14	Ultra Tech Ltd.	0.81	1.06	0.53	0.64	1.31	0.87	0.64	0.61	0.94	0.59	0.60	0.67
15	Bridgepoint group	1.92	1.80	2.20	2.20	2.12	2.05	2.35	2.65	2.39	2.27	2.01	2.34

Source : Annual Reports of the selected co. and published on Website of the co.

Test Calculation table: t test Paired Observations:

(Before 5 years of merger & after 5 Years of merger)

Value	Particular
0.0000000	hypothesized value
1.8228475	mean Mean
1.7086622	mean Mean
0.1141852	mean difference (Mean - Mean)
0.6535989	std. dev.
0.1687585	std. error
15	n
14	df
0.677	t
.5097	p-value (two-tailed)

(Source of table: Megastat software)

Test value > p Value

0.5097 > 0.05

Calculated test value is greater than p value hence,

Result of Hypothesis testing

H₀ = Accepted

H₁ = Rejected

10. Interest Coverage Ratio

Usefulness: To know how many times the firm is able to pay interest

Formula:

$$\frac{\text{EBIT}}{\text{Interest Exps.}}$$

Here

EBIT= earnings before interest and tax

Interest expenses

Hypotheses

- 10H0: There is no significant difference in the before and after Merger & Acquisition performance's mean of Interest Coverage Ratio of selected companies.
- 10H1: There is a significant difference in the before and after Merger & Acquisition performance's mean of Interest Coverage Ratio of selected companies.

Table no 10: Interest Coverage Ratio

Sr. No.	Name of Company	Pre- Merger & Acquisition Ratio (%) Before 5 Years						Post-Merger & Acquisition Ratio (%) After 5 Years					
		5	4	3	2	1	Mean	1	2	3	4	5	Mean
1	HCL Tech Ltd.	14.3	23.5	50.9	70.2	100.9	52.0	119.4	160.6	73.5	28.7	32.0	82.9
2	Infosys Ltd.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	130.5	26.1
3	Persistent Systems Ltd.	0.0	0.0	7306.2	6466.3	1158.2	2986.1	4529.4	5434.7	1595.6	72.4	106.2	2347.7
4	Tech Mahindra Ltd.	449.2	5.3	8.9	8.4	11.2	96.6	122.0	40.7	31.0	31.0	43.1	53.6
5	Wipro Ltd.	21.3	28.2	27.4	33.1	21.6	26.3	18.6	16.7	17.7	33.7	35.2	24.4
6	Adani Port Ltd.	5.5	7.6	4.3	4.4	3.2	5.0	4.3	4.2	4.8	4.8	3.5	4.3
7	Adani Power Ltd.	4.5	1.4	-0.1	0.8	0.9	1.5	0.7	0.7	0.9	0.8	1.6	0.9
8	Birla Corp. Ltd.	7.7	6.8	3.0	4.1	3.9	5.1	1.5	1.9	2.8	3.7	3.5	2.7
9	Havells Ltd.	5.2	11.7	11.7	21.4	81.7	26.3	84.7	57.1	22.1	35.2	53.2	50.5
10	JK Tyre Ltd.	1.1	2.2	2.6	3.1	4.0	2.6	1.3	1.7	1.2	2.1	1.8	1.6
11	Lupin Ltd.	37.1	44.2	81.8	288.7	612.6	212.9	29.6	13.9	8.1	5.5	15.5	14.5
12	Rajesh Export Ltd.	2.7	2.3	2.7	2.3	2.6	2.5	5.1	3.9	4.2	7.1	7.4	5.5
13	Sun Pharma Ltd.	231.1	28.9	143.7	134.1	319.2	171.4	32.9	33.0	11.6	10.7	19.2	21.5
14	UltraTech Ltd.	17.5	9.1	6.1	6.7	7.2	9.3	3.3	3.8	6.4	10.5	10.8	7.0
15	Bridgepoint group	71.5	95.1	128.2	149.5	95.7	108.0	31.4	21.9	25.3	33.5	29.4	28.3

Source : Annual Reports of the selected co. and published on Website of the co.

Test Calculation table: t test Paired Observations:

(Before 5 years of merger & after 5 Years of merger)

Value	Particular
0.0000000	hypothesized value
247.0415528	mean Mean
178.0845094	mean Mean
68.9570435	mean difference (Mean - Mean)
170.8395924	std. dev.
44.1105931	std. error
15	n
14	df
1.563	t
.1403	p-value (two-tailed)

(Source of table: Megastat software)

Test value > p Value

0.1403 > 0.05

Calculated test value is greater than p value hence,

Result of Hypothesis testing

H₀ = Accepted

H₁ = Rejected

5. CONCLUSION

Conclusion includes findings and suggestions

Findings

1. It is clear that overall average of EBIT to Sales Ratio (contribution) margin reduced for 10 out of 15 selected sample companies after the Merger & Acquisition (M&A). it shows an un-favourable effect due to M&A for the 10 companies and only 5 company have shown slightly improvement in average EBIT to Sales Ratio. Moreover, after applying appropriate statistical test research couldn't accept the null hypotheses. Its show that the EBIT to Sales Ratio changes after M&A in significant manner. Decreasing this ratio is not good sign for any business. this thing is happened in selected companies.
2. It is clear that overall average of net profit margin reduced for 14 out of 15 selected sample companies after the Merger & Acquisition (M&A). it shows an un-favourable effect due to M&A for the 14 companies and only 1 company i.e. UltraTech Cement Ltd. shows slightly improvement in average NPR. Moreover, after applying appropriate statistical test research couldn't accept the null hypotheses. Its show that the net profit changes after M&A in significant manner. We know that to increase a net profit is good sign for any business. But in this study selected co. have to perform well in future.

3. It is clear that overall average of Return on Net Worth Ratio margin reduced for 14 out of 15 selected sample companies after the Merger & Acquisition (M&A). it shows an unfavourable effect due to M&A for the 14 companies and only 1 company i.e. Adani Power Ltd. shows good improvement in average Return on Net Worth Ratio. Moreover, after applying appropriate statistical test research accept the null hypotheses. Means there is no significant difference in this net worth ration. This ratio is generally use to know the profitably of the co.
4. It is clear that overall average of Return on Capital Employed margin increased for 12 out of 15 selected sample companies after the Merger & Acquisition (M&A). it shows a positive effect due to M&A for the 12 companies and only 3 company shows slightly decreasing in average Return on Capital Employed. Moreover, after applying appropriate statistical test research can accept the null hypotheses. Its show that the Return on Capital Employed changes after M&A in does not change in significant manner. It is as per exception. When two co. merger definitely their capital would increase. Same thing happened here. This ratio is useful to know the profitability of Co. or business.
5. It is clear that overall average of Return on Assets Ratio margin decreasing for 13 out of 15 selected sample companies after the Merger & Acquisition (M&A). it shows a negative effect due to M&A for the 13 companies and only 2 company shows slightly increasing in average Return on Assets Ratio. Moreover, after applying appropriate statistical test research couldn't accept the null hypotheses. Its show that the Return on Assets Ratio changes after M&A in does change in significant manner. This ratio is useful to know the profitability of Co. or business.
6. It is clear that overall average of Debt- Equity Ratio margin increased for 08 out of 15 selected sample companies after the Merger & Acquisition (M&A). the less is this ratio is good for the co. it shows a fifty-fifty situation due to M&A. Moreover, after applying appropriate statistical test research can accept the null hypotheses. Its show that there is not significant difference in the Debt- Equity Ratio. This ratio is useful to know the proportion of long term liabilities in relation to owners' funds.
7. It is clear that overall average of Asset Turnover Ratio margin increased for 4 co. decreasing in 8 co. while as it was in 3 co. out of 15 selected sample companies after the Merger & Acquisition (M&A). it shows a mix kind of effect due to M&A. Moreover, after applying appropriate statistical test research can accept the null hypotheses. Its show that the Asset Turnover Ratio changes after M&A in does not change in significant manner. It is as per exception. This ratio is useful to know the efficiency with which total assets are utilized in the business
8. It is clear that overall average of Current Ratio margin increased for 10 co. decreasing in 5 co. out of 15 selected sample companies after the Merger & Acquisition (M&A). It shows a unfavourable kind of effect due to M&A. Moreover, after applying appropriate statistical test research can accept the null hypotheses. Its show that the Current Ratio after M&A does not change in significant manner. It is as per exception. This ratio is useful to know the liquid position or the working capital position of the business. The more percentage of ratios shows good sign.
9. It is clear that overall average of Quick Ratios margin increased for 7 co. and decreasing

in 8 co. out of 15 selected sample companies after the Merger & Acquisition (M&A). It shows a mix kind of effect due to M&A. Moreover, after applying appropriate statistical test research can accept the null hypotheses. Its show that the Quick Ratios after M&A does not change in significant manner. It is as per exception. This ratio is useful to know whether the firm will be able to pay current liabilities immediately. The more percentage of ratios shows good sign for the business.

10. It is clear that overall average of Interest Coverage Ratio margin increased for 4 co. and decreasing in 11 co. out of 15 selected sample companies after the Merger & Acquisition (M&A). It shows a unfavourable kind of effect due to M&A. Moreover, after applying appropriate statistical test research can accept the null hypotheses. Its show that the Interest Coverage Ratio after M&A does not change in significant manner. It is as per exception. This ratio is useful to know how many times the firm is able to pay interest. The more percentage of ratios shows good sign for the business.

Suggestions:

Any Co. / cos./ Business/ entrepreneur should check following things/ steps/ process at the time of M&A took places.

1. Determine Growth Markets/Services
2. Identify Merger and Acquisition Candidates
3. Assess Strategic Financial Position and Fit
4. Make a Go/No-Go Decision:
5. Conduct Valuation
6. Perform Due Diligence, negotiate a Definitive Agreement, and Execute Transaction:
7. Implement Transaction and Monitor Ongoing Performance

References

- 1) Banerjee, Soumya (2017) post-merger performance a study of selected indian companies. (Doctoral Thesis, University of Calcutta). 2017. [http://shodhganga.inflibnet.ac.in.\(PublicationNo.http://hdl.handle.net/10603/211639\)](http://shodhganga.inflibnet.ac.in.(PublicationNo.http://hdl.handle.net/10603/211639)).
- 2) Barot G. C. (2022), "Entrepreneur's opinions and consciousness about Goods and services tax (gst) implemented in selected Cities", Towards Excellence (ISSN NO. 0974-035X) MARCH -2022, VOL. 14, ISSUE NO. 1 Pp 290-306
- 3) Beverly, C., Sutejo, B. S., & Murhadi, W. R. (2019, March). Company performance before and after a merger. In *16th International Symposium on Management (INSYMA 2019)* (pp. 28-31). Atlantis Press. <https://www.atlantis-press.com/proceedings/insyma-19/55915418>
- 4) Borodin, A., Sayabek, Z. S., Islyam, G., & Panaedova, G. (2020). Impact of mergers and acquisitions on companies' financial performance. *Journal of International Studies*, 13(2). <https://www.ceeol.com/search/viewpdf?id=1012093>
- 5) Kothari C. R., (2004) Research Methodology: Methods and Techniques, (ISBN (13): 978-81-224-2488-1) (2nd Edition) New Age International (P) Limited, Publishers, New Delhi, pp 196-200.

- 6) Mahesh, R., & Prasad, D. (2012). Post-merger and acquisition financial performance analysis: A case study of select Indian airline companies. *International journal of engineering and management sciences*, 3(3), 362-369. <https://rootindexing.com/journal/international-journal-of-engineering-and-management-sciences--2/>
- 7) Patel V. T. (2022) Pre And Post-Merger & Acquisition Performance Of Selected Indian Companies, Ph.D. Scholar, Gujarat University, Ahmedabad
- 8) Shah, R.A. (2005). Impact of Merger on the Performance of Selected Corporate Units in India (Doctoral Thesis, Sardar Patel University). Retrieved April 2, 2016. [http://shodhganga.inflibnet.ac.in.\(PublicationNo.http://hdl.handle.net/10606/7640](http://shodhganga.inflibnet.ac.in.(PublicationNo.http://hdl.handle.net/10606/7640)
- 9) Yadong, C., Lee, L. C., Kee, P. L., & Quah, K. (2019). The impact of mergers and acquisitions on financial performance of listed companies in China. *International Journal of Entrepreneurship*, 2(8), 01-12. <http://www.ijemp.com/>

Websites

- 1) <https://testbook.com/maths/paired-t-test#:~:text=error%20or%20chance.-,The%20formula%20for%20the%20paired%20t%20test%20is%20given%20by,two%20sets%20of%20joined%20observations.>
- 2) <https://www.moneycontrol.com/>
- 3) <https://huconsultancy.com/7-steps-to-successful-merger-acquisition/>
- 4) <https://www.livemint.com/news/india/india-m-a-activity-at-three-year-high-refinitiv-11633176536373.html>.
- 5) <https://www.livemint.com/news/india/india-m-a-activity-at-three-year-high-refinitiv-11633176536373.html>.