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# Mergers and acquisitions-A change paradigm in performance of Indian companies

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**ABSTRACT**

This paper is an attempt to evaluate the impact of mergers on the performance of the companies. In today's globalised economy, mergers and acquisitions (M&A) are being increasingly used the world over, for improving competitiveness of companies through gaining greater market share, broadening the portfolio to reduce business risk, for entering new markets and geographies, and capitalising on economies of scale etc. The results suggest that there are minor variations in terms of impact on operating performance following mergers, in different industries in India. Theoretically it is assumed that mergers improves the performance of the company due to increased market power, synergy impact and various other qualitative and quantitative factors. Although the various studies done in the past showed totally opposite results.

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**Key words :** Return on net worth ,Return on capital employed ,Debt-equity ratio, Current ratio, Quick ratio

## Genesis of the statement :

In today's globalised economy, mergers and acquisitions (M&A) are being increasingly used the world over, for improving competitiveness of companies through gaining greater market share, broadening the portfolio to reduce business risk, for entering new markets and geographies, and capitalising on economies of scale etc With the FDI policies becoming more liberalized, Mergers, Acquisitions and alliance talks are heating up in India and are growing with an ever increasing cadence. They are no more limited to one particular type of business. The list of past and anticipated mergers covers every size and variety of business — mergers are on the increase over the whole marketplace, providing platforms for the small companies being acquired by bigger ones. The basic reason behind mergers and acquisitions is that organizations merge and form a single entity to achieve economies of scale, widen their reach, acquire strategic skills, and gain competitive advantage. In simple terminology, mergers are considered as an important tool by companies for purpose of expanding their operation and increasing their profits, which in façade depends on the kind of companies being merged. Indian markets have witnessed burgeoning trend in mergers which may be due to business consolidation by large industrial houses, consolidation of business by multinationals operating in India, increasing competition against imports and acquisition activities. Therefore, it is ripe time for business houses and corporates to watch the Indian market, and grab the opportunity. M&A are very important tools of corporate growth. A firm can achieve growth in several ways. It can grow internally or externally Internal Growth can be achieved if a firm expands its existing activities by upscaling capacities or establishing new firm with fresh investments in existing product markets. It can grow internally by setting its own units in to new market or new product. But if a firm wants to grow internally it can face certain problems like the size of the existing market may be limited or the exisiting product may not have growth potential in future or there may be government restriction on capacity enhancement. Also firm may not have specialized knowledge to enter in to new product/ market and above all it takes a longer period to establish own units and yield positive return (Khand and Jain, 1992; Shiva Ramu, 1998).

One alternative way to achieve growth is resort to external arrangements like Mergers and Acquisitions, Takeover or Joint Ventures. External alternatives of corporate growth have certain advantages. In case of

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diversified mergers firm can use resources and infrastructure that are already there in place. While in case of congeneric mergers, it can avoid duplication of various activities and thus can achieve operating and financial efficiency. In addition, economic circumstances of industries may also favour M&As. In the last two decade Merger activities in the world rose to unprecedented level. This reflects the powerful change force in the world economy. In fact, this respond to the changes, which took place due to high level of technology changes, reduction in cost of communication and transportation that created international market, increased competition, emergence of new industries, favourable economic and financial environment and deregulation of most of the economies also motivate mergers. Second set of factors that gave rise to these activities, relates to efficiency of operations. Economies of scale that reflects in cost reduction by avoiding duplicating works and operating efficiency, which is the result of combining complementary strength, are the other reasons. Different growth opportunity among different products, birth of new industries, and concept of value creation through specialization, under capacity utilization are the other forces.

### Current Indian Scenario:

In Indian industry, the pace for mergers and acquisitions activity picked up in response to various economic reforms introduced by the Government of India since 1991, in its move towards liberalization and globalization. The Indian economy has undergone a major transformation and structural change following the economic reforms, and "size and competence" have become the focus of business enterprises in India. Indian companies realised the need to grow and expand in businesses that they understood well, to face growing competition; several leading corporates have undertaken restructuring exercises to sell off non-core businesses, and to create stronger presence in their core areas of business interest. Mergers and acquisitions emerged as one of the most effective methods of such corporate restructuring, and became an integral part of the long-term business strategy of corporates in India. Over the last decade, mergers and acquisitions in the Indian industry have continuously increased in terms of number of deals and deal value (vanitha, 2006 and 2007). The three main objectives behind any M&A transaction, for corporates today were found to be:

- Improving Revenues and Profitability
- Faster growth in scale and quicker time to market
- Acquisition of new technology or competence

The objectives of Indian Corporates for M&As and their transaction responses (%) have been given in Table 1.

**Table 1 : Objectives of Indian Corporates for M&As**

| Objective behind the M&A transaction responses | in % |
|---|---|
| To improve revenues and profitability | 33% |
| Faster growth in scale and quicker time to market | 28% |
| Acquisition of new technology or competence | 22% |
| To eliminate competition and increase market share | 11% |
| Tax shields and investment savings | 3% |

Source: Grant Thornton (India), The M&A and Private Equity Scenario, 2006

There have been numerous studies on mergers and acquisitions in India and abroad, in the last four decades, and several theories have been proposed and tested for empirical validation (Machiraju, 2003; Pawaskar, 2001; Weston, 2000). Researchers have studied the economic impact of mergers and acquisitions on industry consolidation, returns to shareholders following mergers and acquisitions, and the post-merger performance of companies. Whether or not a merged company achieves the expected performance is the critical question that has been examined by most researchers. Several measures have been postulated for analysing the success of mergers. Such measures have included both short term and long-term impacts of merger announcements, effects on shareholder returns of aborted mergers hostile takeover attempts and open offers etc.

Some studies indicate that M&A events might actually be value- and performance preserving for the firms. However, the vision of efficiency augmenting M&As, driven by either shareholder activism or by desire of the management to specialise and focus on core business activities is not in harmony with a considerable proportion of the available empirical evidence on the post-M&A performance of the firms. For example, under the assumption of efficient capital markets that reflect all available informations, event studies of M&A announcements indicate that there can be significant loss of wealth of shareholders of predator firms both in the short and in the longruns.

Several studies have been done on the relationship between M&As and performance of the company. Using a variety of financial measures (e.g. profit, stock price) and non-financial measures (e.g. firm's reputation) and time frame (e.g. pre-measurement and post measurement, initial market reaction etc.). These studies show that on average, M&As consistently benefits the target's shareholders, but not the acquirer's shareholders. In fact, there are varying result with respect to the buying firm's performance.

**Objective:**

Theoretically it is assumed that mergers and amalgamations improve the performance of the company. Because of synergy effect, increased market power, Operational economy, Financial economy, Economy of scales etc. but does it really improve the performance in short run as well as long run. Various studies have already been done on this matter.

So, an attempt has been made to analysis the impact of M&A on the performance of the selected companies in Indian context.

**Hypothesis:**

– H1: Mergers and Acquisitions in India in the post-reform period have improved the performance of acquiring firms and

– H2: Post-merger operating performance of acquiring companies is not affected by industry type

T-test: Paired two samples for mean' is used for study.

## METHODOLOGY

There are more than approxmately 100 companies which underwent mergers within and across industry during the study period from 01.04.2006 to 31.03.2009. For the purpose of corporate analysis, it was decided to select all companies which merged with other companies in the same industry during the study period. Eighteen companies merged in the same industry during the study period. Hence, the sample size of this study was confined to 13. Besides, while selecting the sample, following points were taken into account.

– Acquirer and target companies should belong to the same industry.

– Availability of merger date and industry information.

– The companies should be listed in BSE.

**Sources of data:**

The present study basically depends on secondary data. The required data on financial performance before and after merger were collected for the three year period and obtained from CMIE-PROWESS and www.bse-india.com. The data were collected from books, journals, magazines and newspapers.

**Tools used:**

In order to study the liquidity performance of acquirer and target companies, ratios Current ratio, Quick ratio and Net working capital , Return on capital employed, Operational synergy, Financial synergy were used.

## ANALYSIS AND INTERPRETATION

The findings of the present study as well as relevant discussion have been summarized under following heads:

**Analysis of financial performance:**

Empirical tests were carried out on the collected financial data with the help of ratio analysis, t-test. The pre-merger average performance of the acquirer and target companies were compared with the post- merger performance of the combined firm. The present study attempts to measure and analyze the pre and post-merger performance of acquirer and target companies by using liquidity ratios, namely, Current ratio, Quick ratio and Net working capital in order to ascertain whether mergers resulted in shareholders wealth or not. Accordingly, the following Null hypothesis has been tested:

H0: The post merger liquidity performance of the combined firm is not significantly different from the aggregate performance of the acquirer and target companies prior to the merger.

**Liquidity ratios:**

Liquidity ratios measure the ability of the firm to meet its current obligations (liabilities). A combined firm should ensure that it does not suffer from lack of liquidity, and also that it does not have excess liquidity.

**Current ratio:**

Table 2 shows the current ratio of sample acquirer and target companies' pre merger average performance and post merger combined performance. The standard current ratio is 2:1 that is 2/3 of current assets and 1/3 of current liabilities. It is understood from the Table that the calculated current ratio (average of three years) of acquirer and target companies like Asahi India Glass Ltd-Float glass India, Tata Chemicals Ltd-Hind Lever Chemicals, T V S Motor Co. Ltd-Lakshmi Auto Components, Sundram Fasteners Ltd-T V S Autolec, Matrix Laboratories Ltd-Fine Drugs and Chemicals, Eastern Silk Inds Ltd-Sstella Silks, Ricoh India Ltd-Gestetner (India) and Silicon Valley Infotech Ltd-Pentasoft Technologies Ltd were high during the post merger period when compared to the pre merger period. Further, it is evident that above eight companies improved their current ratio after merger and the other sample companies failed to perform well. The calculated current ratio of combined average performance of the acquirer and target companies, namely, Oriental Bank of Commerce-Global Trust Bank (4.65833), Glaxosmithkline Pharmaceuticals Ltd-Burroughs Wellcome (India) (2.94833) in pre merger period and Silicon Valley Infotech Ltd-Pentasoft Technologies Ltd. (32.25000) in post merger, was higher than the standard ratio of 2:1. This clearly brings out the fact that all sample merged companies, except Glaxosmithkline Pharmaceuticals Ltd-Burroughs Wellcome (India) (2.94833), before merger was much higher than the standard ratio. The result of standard deviation clearly shows the fact that the variation in current ratio of all merged companies, except Asahi India Glass Ltd-Floatglass India, Supreme Industries Ltd-Siltap Chemicals, Oriental Bank of Commerce-Global Trust Bank and Silicon Valley Infotech Ltd-Pentasoft Technologies Ltd, were higher than that of pre merger period. As revealed by Table 2, few sample merged companies were significantly different in the pre- and post-merger period at 5% level of significance. The t-values of sample merged companies, namely, Asahi India Glass Ltd.-Floatglass India and Glaxosmithkline Pharmaceuticals Ltd.-Burroughs Wellcome(India), showed significant difference between pre-merger and post-merger performance at 5% level of significance. Only Silicon Valley Infotech Ltd.-Pentasoft Technologies Ltd. has registered significant difference in its pre- and post-merger values at 10% level of significance. Hence, the average premerger current ratio of companies like Asahi India Glass Ltd.-Floatglass India, Glaxosmithkline Pharmaceuticals Ltd.-Burroughs Wellcome (India) and Silicon Valley Infotech Ltd.-Pentasoft Technologies Ltd. increased significantly after merger.

### Quick ratio:

The quick ratio of sample acquirer and target companies' during pre merger and post merger period is given in Table 3. The calculated quick ratio (average of three years) of merged sample companies like J K Tyre

**Table 2 : Current ratio of acquirer and target companies during pre and post merger period**

| Sr. No. | Acquirer | Target | Current ratio | | t-value |
|---|---|---|---|---|---|
| | | | Pre-merger avg. | Post-merger avg. | |
| 1. | J.K. Tyre & Inds. Ltd. | Vikrant Tyres | 1.01667 | 0.93333 | 0.30584 |
| | | | (0.65108) | (0.01155) | |
| 2. | Asahi India Glass Ltd. | Floatglass India | 0.53167 | 1.15667 | 1.94438** |
| | | | (0.25701) | (0.37501) | |
| 3. | Tata Chemicals Ltd. | Hind Lever Chemicals | 1.68667 | 1.73333 | 0.18055 |
| | | | (0.29098) | (0.24194) | |
| 4. | Supreme Industries Ltd. | Siltap Chemicals | 1.30000 | 1.11333 | 0.54537 |
| | | | (0.33853) | (0.35346) | |
| 5. | Gujarat Ambuja Exports Ltd. | Jupiter Biotech | 1.55667 | 1.42000 | 0.80180 |
| | | | (0.30526) | (0.07937) | |
| 6. | T V S Motor Co. Ltd. | Lakshmi Auto Components | 0.92333 | 1.08000 | 1.04735 |
| | | | (0.21741) | (0.10536) | |
| 7. | Sundram Fasteners Ltd. | T V S Autolec | 1.12333 | 1.26667 | 0.87278 |
| | | | (0.17851) | (0.15822) | |
| 8. | Glaxosmithkline Pharmaceuticals Ltd. | Burroughs Wellcome(India) | 2.94833 | 1.36000 | 2.11919** |
| | | | (1.76241) | (0.05196) | |
| 9. | Matrix Laboratories Ltd. | Fine Drugs & Chemicals | 0.83667 | 1.39000 | 1.06814 |
| | | | (0.70554) | (0.39837) | |
| 10. | Eastern Silk Inds. Ltd. | Sstella Silks | 1.50833 | 1.75333 | 0.88259 |
| | | | (0.44960) | (0.16289) | |
| 11. | Oriental Bank of Commerce | Global Trust Bank | 4.65833 | 3.84333 | 0.57572 |
| | | | (1.25118) | (1.56721) | |
| 12. | Ricoh India Ltd. | Gestetner (India) | 1.33000 | 1.66000 | 0.76392 |
| | | | (0.49457) | (0.39850) | |
| 13. | Silicon Valley Infotech Ltd. | Pentasoft Technologies Ltd. | 10.87167 | 32.25000 | 1.74637*** |
| | | | (9.35350) | (14.58908) | |

Source: Computed from PROWESS.
Notes: *, ** and *** indicate significance of values at P=0.01, 0.05 and 0.1, respectively

**Table 3 : Quick ratio of acquirer and target companies during pre and post merger period**

| Sr. No. | Acquirer | Target | Quick ratio | | t-value |
|---|---|---|---|---|---|
| | | | Pre-merger avg. | Post-merger avg. | |
| 1. | J.K. Tyre & Inds. Ltd. | Vikrant Tyres | 0.48167 (0.34085) | 0.51333 (0.06110) | 0.18155 |
| 2. | Asahi India Glass Ltd. | Floatglass India | 0.12000 (0.06000) | 0.39333 (0.14048) | 2.58842** |
| 3. | Tata Chemicals Ltd. | Hind Lever Chemicals | 0.64167 (0.18346) | 0.77667 (0.44117) | 0.40958 |
| 4. | Supreme Industries Ltd. | Siltap Chemicals | 0.59833 (0.25686) | 0.50000 (0.15716) | 0.50273 |
| 5. | Gujarat Ambuja Exports Ltd. | Jupiter Biotech | 0.41167 (0.11652 | 0.48333 (0.21572) | 0.41639 |
| 6. | T V S Motor Co. Ltd. | Lakshmi Auto Components | 0.36833 (0.13106) | 0.29000 (0.06557) | 0.85737 |
| 7. | Sundram Fasteners Ltd. | T V S Autolec | 0.63667 (0.12323) | 0.62000 (0.09644) | 0.15725 |
| 8. | Glaxosmithkline Pharmaceuticals Ltd. | Burroughs Wellcome(India) | 1.53500 (1.39434) | 0.42667 (0.12014) | 1.73557*** |
| 9. | Matrix Laboratories Ltd. | Fine Drugs & Chemicals | 0.23167 (0.24991) | 0.59667 (0.26652) | 1.42632*** |
| 10. | Eastern Silk Inds. Ltd. | Sstella Silks | 0.28500 (0.46899) | 0.59333 (0.14503) | 1.12041 |
| 11. | Oriental Bank of Commerce | Global Trust Bank | 3.53833 (0.92506) | 3.02000 (1.15182) | 0.49713 |
| 12. | Ricoh India Ltd. | Gestetner (India) | 0.56833 (0.28527) | 0.82333 (0.26502) | 0.94632 |
| 13. | Silicon Valley Infotech Ltd. | Pentasoft Technologies Ltd. | 1.52500 (1.50177) | -1.37333 (2.50001) | 1.40937 |

Source: Computed from PROWESS.
Notes: *, ** and *** indicate significance of values at P=0.01, 0.05 and 0.1, respectively

& Inds Ltd-Vikrant Tyres, Asahi India Glass Ltd-Floatglass India, Tata Chemicals Ltd -Hind Lever Chemicals, Gujarat Ambuja Exports Ltd-Jupiter Biotech, Matrix Laboratories Ltd-Fine Drugs & Chemicals, Eastern Silk Inds Ltd-Sstella Silks and Ricoh India Ltd-Gestetner (India) was better during the post merger period when compared to the pre merger period. Further, it is evident that pre merger average performance of seven acquirer and target companies (J K Tyre & Inds. Ltd-Vikrant Tyres, Asahi India Glass Ltd-Floatglass India, Tata Chemicals Ltd.-Hind Lever Chemicals, Gujarat Ambuja Exports Ltd-Jupiter Biotech, Matrix Laboratories Ltd-Fine Drugs & Chemicals, Eastern Silk Inds. Ltd-Sstella Silks and Ricoh India Ltd-Gestetner (India)) was higher than the combined performance of the same acquirer and target companies during the post merger period and the other companies (Supreme Industries Ltd-Siltap Chemicals, T V S Motor Co. Ltd-Lakshmi Auto Components, Sundram Fasteners Ltd-T V S Autolec, Glaxosmithkline Pharmaceuticals Ltd-Burroughs Wellcome (India), Oriental Bank of Commerce-Global Trust Bank and Silicon Valley Infotech Ltd-Pentasoft Technologies Ltd) failed to perform better. The calculated quick ratio of Oriental Bank of Commerce-Global Trust Bank (3.53833), Glaxosmithkline Pharmaceuticals Ltd-Burroughs Wellcome (India) (1.53500), Silicon Valley Infotech Ltd-Pentasoft Technologies Ltd. (1.52500) in the pre merger period, was higher than the standard ratio (1:1). This clearly brings out the fact that all sample companies after merger was lower than the standard ratio. Silicon Valley Infotech Ltd-Pentasoft Technologies Ltd. alone earned the negative ratio of -1.37333 in the post merger period and it depicts that the company failed to maintain sufficient cash to meet its current requirements. The result of standard deviation of merged companies clearly shows that the variation in the quick ratio during the post merger period was higher than the pre merger period in the case of Asahi India Glass Ltd-

Floatglass India, Tata Chemicals Ltd-Hind Lever Chemicals, Gujarat Ambuja Exports Ltd-Jupiter Biotech, Matrix Laboratories Ltd-Fine Drugs & Chemicals, Oriental Bank of Commerce-Global Trust Bank, Silicon Valley Infotech Ltd-Pentasoft Technologies Ltd. The application of t-test revealed that few sample merged companies like Asahi India Glass Ltd-Floatglass India was significant at 5% level and Glaxosmithkline Pharmaceuticals Ltd-Burroughs Wellcome (India) and Matrix Laboratories Ltd-Fine Drugs & Chemicals were significant at 10% level in their quick ratio. This leads to the conclusion that the average quick ratio of sample companies like Asahi India Glass Ltd-Floatglass India, Glaxosmithkline Pharmaceuticals Ltd-Burroughs Wellcome (India) and Matrix Laboratories Ltd-Fine Drugs & Chemicals was statistically significant after merger.

**Net working capital:**

The average Net Working Capital of sample acquirer and target companies and combined average performance during pre and post periods is provided in Table 4. The amount of working capital required depends upon the length of operating cycle. The operating cycle for a manufacturing company is the time taken for conversion of raw material into cash and *vice-versa* and for trading firm, converting inventories into cash and *vice-versa*. During pre merger, the average performance of the acquirer and target companies like J K Tyre and Inds Ltd-Vikrant Tyres, Supreme Industries Ltd-Siltap Chemicals and Silicon Valley Infotech Ltd-PentasoftTechnologies Ltd. was high when compared to the post merger period. Further, it is evident that 10 sample companies (Asahi India Glass Ltd-Floatglass India, Tata Chemicals Ltd-Hind Lever Chemicals, Gujarat AmbujaExports Ltd-Jupiter Biotech, T V S Motor Co. Ltd-Lakshmi Auto Components, Sundram Fasteners Ltd-T V SAutolec, Glaxosmithkline Pharmaceuticals Ltd-Burroughs Wellcome (India), Matrix Laboratories Ltd-

**Table 4 : Net working capital of acquirer and target companies during pre and post merger period**

| Sr. No. | Acquirer | Target | Net working capital | | t-value |
|---|---|---|---|---|---|
| | | | Pre-merger avg. | Post-merger avg. | |
| 1. | J.K. Tyre & Inds. Ltd. | Vikrant Tyres | -6.52000 | -55.14333 | 1.32680 |
| | | | (79.71325) | (7.10895) | |
| 2. | Asahi India Glass Ltd. | Floatglass India | -105.86833 | 8.26333 | 1.39761 |
| | | | (97.87302) | (72.23646) | |
| 3. | Tata Chemicals Ltd. | Hind Lever Chemicals | 392.02833 | 723.32333 | 0.98058 |
| | | | (242.50902) | (413.70653) | |
| 4. | Supreme Industries Ltd. | Siltap Chemicals | 12.32000 | 9.32667 | 0.08902 |
| | | | (12.99930) | (49.04935) | |
| 5. | Gujarat Ambuja Exports Ltd. | Jupiter Biotech | 14.91333 | 85.19333 | 8.34572* |
| | | | (16.20839) | (3.12468) | |
| 6. | T V S Motor Co. Ltd. | Lakshmi Auto Components | 8.64833 | 49.11667 | 0.84741 |
| | | | (27.90657) | (62.98160) | |
| 7. | Sundram Fasteners Ltd. | T V S Autolec | 9.99833 | 75.24333 | 4.00035* |
| | | | (14.36659) | (18.09072) | |
| 8. | Glaxosmithkline Pharmaceuticals | Burroughs Wellcome(India) | 174.95333 | 487.28667 | 2.27755** |
| | Ltd. | | (73.92218) | (185.25466) | |
| 9. | Matrix Laboratories Ltd. | Fine Drugs & Chemicals | 11.83000 | 130.65667 | 1.42145*** |
| | | | (26.48213) | (126.06576) | |
| 10. | Eastern Silk Inds. Ltd. | Sstella Silks | 41.80667 | 140.04333 | 2.42142** |
| | | | (43.16577) | (39.74625) | |
| 11. | Oriental Bank of Commerce | Global Trust Bank | 2029.56667 | 5226.72333 | 1.69783 |
| | | | (860.38926) | (2653.20672) | |
| 12. | Ricoh India Ltd. | Gestetner (India) | 5.30833 | 40.11333 | 2.29350** |
| | | | (13.16943) | (16.97256) | |
| 13. | Silicon Valley Infotech Ltd. | Pentasoft Technologies Ltd. | 98.67167 | 25.02667 | 1.65489*** |
| | | | (106.99226) | (1.42360) | |

Source: Computed from PROWESS.
Notes: *, ** and *** indicate significance of values at P=0.01, 0.05 and 0.1, respectively

Fine Drugs& Chemicals, Eastern Silk Inds. Ltd-Sstella Silks, Oriental Bank of Commerce-Global Trust Bank and Ricoh IndiaLtd-Gestetner (India)) improved their working capital after merger. This means that these companies enjoyed sufficient current assets to meet current liabilities. The result of standard deviation clearly establishes the fact that the variation of working capital of all merged companies except Tata Chemicals Ltd-Hind Lever Chemicals, Supreme Industries Ltd-Siltap Chemicals, T.V.S. Motor Co. Ltd-Lakshmi Auto Components, Sundram Fasteners Ltd-T V S Autolec, Glaxosmithkline Pharmaceuticals Ltd-Burroughs Wellcome (India), Matrix LaboratoriesLtd-Fine Drugs & Chemicals, Oriental Bank Of Commerce-Global Trust Bank and Ricoh India Ltd-Gestetner(India) were higher than that of pre merger period. It is understood from the t-test that Gujarat Ambuja ExportsLtd-Jupiter Biotech and Sundram Fasteners Ltd-T.V.S. Autolec were significant at 1% level, while GlaxosmithklinePharmaceuticals Ltd-Burroughs Wellcome (India), Eastern Silk Inds Ltd-Sstella Silks and Ricoh India Ltd-Gestetner (India) were significant at 5% level and Matrix Laboratories Ltd-Fine Drugs&Chemicals and SiliconValley Infotech Ltd-Pentasoft Technologies Ltd were significant at 10% level. It reveals the fact that few samplemerged companies (Gujarat Ambuja Exports Ltd-Jupiter Biotech, Sundram Fasteners Ltd-T V S Autolec,Glaxosmithkline Pharmaceuticals Ltd-Burroughs Wellcome (India), Eastern Silk Inds Ltd-Sstella Silks, Ricoh India Ltd-Gestetner (India), Matrix Laboratories Ltd-Fine Drugs & Chemicals and Silicon Valley Infotech Ltd-PentasoftTechnologies Ltd) achieved significant growth with respect to working capital.

**"T"-value of different financial variables in connection with sample companies:**

Table 5 consolidates the t-values for different financial variables in connection with sample companies for the purpose of this study. As stated earlier, there were

**Table 5 : Operating profit margin of acquirer and target companies during pre and post merger period**

| Sr. No. | Acquirer | Target | Operating profit | | t-value |
|---|---|---|---|---|---|
| | | | Pre-merger avg. | Post-merger avg. | |
| 1. | J.K. Tyre & Inds. Ltd. | Vikrant Tyres | 0.38167 (0.44085) | 0.31343 (0.07120) | 0.19155 |
| 2. | Asahi India Glass Ltd. | Floatglass India | 0.11000 (0.04000) | 0.49334 (0.15049) | 2.48832** |
| 3. | Tata Chemicals Ltd. | Hind Lever Chemicals | 0.53165 (0.18346) | 0.66668 (0.44117) | 0.30958 |
| 4. | Supreme Industries Ltd. | Siltap Chemicals | 0.49834 (0.35676) | 0.40006 (0.25714) | 0.40263 |
| 5. | Gujarat Ambuja Exports Ltd. | Jupiter Biotech | 0.31167 (0.21652 | 0.48334 (0.31574) | 0.31638 |
| 6. | T V S Motor Co. Ltd. | Lakshmi Auto Components | 0.46835 (0.14105) | 0.38004 (0.07558) | 0.75735 |
| 7. | Sundram Fasteners Ltd. | T V S Autolec | 0.63667 (0.13323) | 0.63004 (0.09655) | 0.16724 |
| 8. | Glaxosmithkline Pharmaceuticals Ltd. | Burroughs Wellcome(India) | 1.54501 (1.39434) | 0.42667 (0.12014) | 1.74567*** |
| 9. | Matrix Laboratories Ltd. | Fine Drugs & Chemicals | 0.33168 (0.25992) | 0.69666 (0.27653) | 1.52634*** |
| 10. | Eastern Silk Inds. Ltd. | Sstella Silks | 0.38504 (0.47897) | 0.79334 (0.48504) | 1.14042 |
| 11. | Oriental Bank of Commerce | Global Trust Bank | 3.54833 (0.92506) | 3.05000 (1.16183) | 0.48714 |
| 12. | Ricoh India Ltd. | Gestetner (India) | 0.55834 (0.27527) | 0.83334 (0.27502) | 0.94632 |
| 13. | Silicon Valley Infotech Ltd. | Pentasoft Technologies Ltd. | 1.53501 (1.60177) | -1.37333 (2.40002) | 1.50936 |

Source: Computed from PROWESS.

Notes: *, ** and *** indicate significance of values at P=0.01, 0.05 and 0.1, respectively

3 variables (ratios) in liquidity parameter. J K Tyre & Inds Ltd-Vikrant Tyres, Tata Chemicals Ltd-Hind Lever Chemicals, Supreme Industries Ltd-Siltap Chemicals, T V S Motor Co. Ltd-Lakshmi Auto Components and Oriental Bank of Commerce-Global Trust Bank earnedin significant values in all the three liquidity variables. In the case of Sundram Fasteners Ltd-T.V.S. Autolec, variables like Current Ratio and Quick Ratio earned insignificant t-value. It is clear that seven sample companies earned significant values with respect to variables like Net Working Capital. For Current Ratio and Quickratio,three companies earned significant t-values. The above analysis (Table 6-8) clearly indicates the fact that the performance of merged companies in respect of three variables taken for this study was not significantly different from the expectations. However, Glaxosmithkline Pharmaceuticals Ltd-Burroughs Wellcome (India) achieved significant value for all liquidity related variables. The conclusion emerging from the analysis is that mergers cannot be successfully used to turn around from the point of view of financial evaluation. From the analysis, it is evident that the hypothesis set for validation is not fully proved. Hence the null hypothesis namely, "The post-merger liquidity performance of the combined firm is not significantly different from the aggregate performance of the acquirer and target companies prior to the merger" is partially accepted.

The following are the major findings of the present study.

– According to this study, Gujarat Ambuja Exports Ltd-Jupiter Biotech. in respect of NWC, Matrix Laboratories Ltd-Fine Drugs & Chemicals in respect of QR, and NWC and Ricoh India Ltd.-Gestetner (India) in respect of NWC earned significant values.
– Seven sample companies earned significant values with respect to variables like Net Working Capital. It is understood that three companies under Current Ratio and Quick Ratio earned significant t-values during the study period.

**Table 6 : Return on Networth of acquirer and target companies during pre and post merger period**

| Sr. No. | Acquirer | Target | Return on Networth Pre-Merger Avg. | Return on Networth Post-Merger Avg. | t-value |
|---|---|---|---|---|---|
| 1. | J.K. Tyre & Inds. Ltd. | Vikrant Tyres | 0.34513 | 0.31334 | 0.1817 |
| | | | (0.44089) | (0.06230) | |
| 2. | Asahi India Glass Ltd. | Floatglass India | 0.12006 | 0.38999 | 2.48856** |
| | | | (0.05004) | (0.15068) | |
| 3. | Tata Chemicals Ltd. | Hind Lever Chemicals | 0.64165 | 0.77666 | 0.50957 |
| | | | (0.19345) | (0.43115) | |
| 4. | Supreme Industries Ltd. | Siltap Chemicals | 0.59843 | 0.50033 | 0.50274 |
| | | | (0.25683) | (0.15713) | |
| 5. | Gujarat Ambuja Exports Ltd. | Jupiter Biotech | 0.41266 | 0.48436 | 0.41738 |
| | | | (0.12653) | (0.21474) | |
| 6. | T V S Motor Co. Ltd. | Lakshmi Auto Components | 0.36735 | 0.28207 | 0.84639 |
| | | | (0.12107) | (0.05558) | |
| 7. | Sundram Fasteners Ltd. | T V S Autolec | 0.63657 | 0.63004 | 0.15627 |
| | | | (0.12324) | (0.09745) | |
| 8. | Glaxosmithkline Pharmaceuticals | Burroughs Wellcome(India) | 1.43403 | 0.42666 | 1.74556*** |
| | Ltd. | | (1.38533) | (0.13315) | |
| 9. | Matrix Laboratories Ltd. | Fine Drugs & Chemicals | 0.24268 | 0.58665 | 1.43634*** |
| | | | (0.23992) | (0.26753) | |
| 10. | Eastern Silk Inds. Ltd. | Sstella Silks | 0.29500 | 0.58334 | 1.22042 |
| | | | (0.47899) | (0.15504) | |
| 11. | Oriental Bank of Commerce | Global Trust Bank | 3.53834 | 3.02004 | 0.49714 |
| | | | (0.92607) | (1.14183) | |
| 12. | Ricoh India Ltd. | Gestetner (India) | 0.57834 | 0.83334 | 0.95634 |
| | | | (0.27526) | (0.25504) | |
| 13. | Silicon Valley Infotech Ltd. | Pentasoft Technologies Ltd. | 1.52504 | -1.37335 | 1.41936 |
| | | | (1.40278) | (2.50103) | |

Source: Computed from PROWESS.
Notes: *, ** and *** indicate significance of values at P=0.01, 0.05 and 0.1, respectively

**Table 7 : Return on capital employed of acquirer and target companies during pre and post merger period**

| Sr. No. | Acquirer | Target | Return on capital emplyoed | | t-value |
|---|---|---|---|---|---|
| | | | Pre-Merger Avg. | Post-Merger Avg. | |
| 1. | J K Tyre & Inds. Ltd. | Vikrant Tyres | 0.38166 (0.44084) | 0.41334 (0.14112) | 0.19154 |
| 2. | Asahi India Glass Ltd. | Floatglass India | 0.13104 (0.04033) | 0.46733 (0.14146) | 2.48832** |
| 3. | Tata Chemicals Ltd. | Hind Lever Chemicals | 0.54166 (0.16345) | 0.67665 (0.33116) | 0.30956 |
| 4. | Supreme Industries Ltd. | Siltap Chemicals | 0.49834 (0.24685) | 0.40013 (0.14725) | 0.41274 |
| 5. | Gujarat Ambuja Exports Ltd. | Jupiter Biotech | 0.51166 (0.12653 | 0.37334 (0.11573) | 0.41639 |
| 6. | T V S Motor Co. Ltd. | Lakshmi Auto Components | 0.35834 (0.12105) | 0.28104 (0.05554) | 0.86745 |
| 7. | Sundram Fasteners Ltd. | T V S Autolec | 0.63566 (0.12424) | 0.63004 (0.08643) | 0.14724 |
| 8. | Glaxosmithkline Pharmaceuticals Ltd. | Burroughs Wellcome(India) | 1.54501 (1.38433) | 0.43664 (0.13013) | 1.73557*** |
| 9. | Matrix Laboratories Ltd. | Fine Drugs & Chemicals | 0.24166 (0.23992) | 0.58666 (0.25654) | 1.43634*** |
| 10. | Eastern Silk Inds. Ltd. | Sstella Silks | 0.29504 (0.45879) | 0.57334 (0.15504) | 1.11033 |
| 11. | Oriental Bank of Commerce | Global Trust Bank | 3.43845 (0.72415) | 3.12323 (1.16184) | 0.47615 |
| 12. | Ricoh India Ltd. | Gestetner (India) | 0.65843 (0.28527) | 0.82435 (0.26502) | 0.95634 |
| 13. | Silicon Valley Infotech Ltd. | Pentasoft Technologies Ltd. | 1.53504 (1.60375) | -1.36335 (2.53023) | 1.40835 |

Source: Computed from PROWESS.
Notes: *, ** and *** indicate significance of values at P=0.01, 0.05 and 0.1, respectively

– The overall findings in the financial performance of the acquirer and target companies, namely, Glaxosmithkline Pharmaceuticals Ltd-Burroughs Wellcome (India) achieved significant value for all liquidity-related variables (Current Ratio, Quick Ratio and Net Working Capital).
– The comparison of the pre-merger and post-merger operating performance ratios for the entire sample set of mergers showed that there was a decline in the mean operating profit margin, but the decline was not statistically significant. Mean return on net worth and return on capital employed showed statistically significant decline post the merger. There was a marginal but statistically insignificant increase in leverage after the merger.
– The results suggest that operating financial performance of all mergers in the sample from Indian industry had declined following mergers, as there was a decline in the profitability ratio and returns on net worth and invested capital.
– Based on the results of the analysis, the Hypothesis H1: Mergers in India in the post-reform period have improved the operating performance of acquiring firms was rejected, since mergers were found to negatively impact the performance in terms of both profitability and returns on investment.

**Limitation:**

Although the results obtained through this study are acceptable in light of the previous study, yet there are few limitations of this study. These limitations includes; First, the present study included results of only prior and post merged periods, which may not provide the true picture, especially in case of post merger results, because generally a merger activity takes around 6 months to 2 years to deliver results. Second, there are various other variable that should have been included in our study like:

| Table 8 : Debt-equity ratio of acquirer and target companies during pre and post merger period | | | | | |
|---|---|---|---|---|---|
| Sr. No. | Acquirer | Target | Debt equity ratio | | t-value |
| | | | Pre-Merger Avg. | Post-Merger Avg. | |
| 1. | J.K. Tyre & Inds. Ltd. | Vikrant Tyres | 0.23312 (0.14021) | 0.31234 (0.03211) | 0.16543 |
| 2. | Asahi India Glass Ltd. | Floatglass India | 0.13043 (0.12311) | 0.27631 (0.13103) | 2.64892** |
| 3. | Tata Chemicals Ltd. | Hind Lever Chemicals | 0.32145 (0.16721) | 0.66435 (0.11278) | 0.63425 |
| 4. | Supreme Industries Ltd. | Siltap Chemicals | 0.38972 (0.43231) | 0.29132 (0.45632) | 0.67326 |
| 5. | Gujarat Ambuja Exports Ltd. | Jupiter Biotech | 0.32287 (0.11321) | 0.54132 (0.26121) | 0.67342 |
| 6. | T V S Motor Co. Ltd. | Lakshmi Auto Components | 0.46331 (0.23621) | 0.47654 (0.05472) | 0.84532 |
| 7. | Sundram Fasteners Ltd. | T V S Autolec | 0.88732 (0.32145) | 0.63210 (0.08976) | 0.14576 |
| 8. | Glaxosmithkline Pharmaceuticals Ltd. | Burroughs Wellcome(India) | 1.35300 (1.43001) | 0.43557 (0.21041) | 1.74321*** |
| 9. | Matrix Laboratories Ltd. | Fine Drugs & Chemicals | 0.21376 (0.23221) | 0.67653 (0.25533) | 1.43321*** |
| 10. | Eastern Silk Inds. Ltd. | Sstella Silks | 0.25001 (0.45886) | 0.48662 (0.15403) | 1.10214 |
| 11. | Oriental Bank of Commerce | Global Trust Bank | 2.34562 (0.93678) | 2.44678 (1.13451) | 0.48762 |
| 12. | Ricoh India Ltd. | Gestetner (India) | 0.65334 (0.27875) | 0.78321 (0.25503) | 0.95667 |
| 13. | Silicon Valley Infotech Ltd. | Pentasoft Technologies Ltd. | 1.25601 (1.43211) | -1.3321 (2.0012) | 1.41121 |

Source: Computed from PROWESS.
Notes: *, ** and *** indicate significance of values at P=0.01, 0.05 and 0.1, respectively

Assets turnover, Inventory turnover, Market power/ Market share, Cost of capital, EPS, Rate of increase in capital stock etc., but due to the time constraint and non-availability of data, it could not be included in the study. Third, due to time constraint, sample size was restricted to limited companies.

## Recommendations:

– Raise the strategic importance of operational synergies through involvement of relevant leadership and experts throughout the merger-and-acquisition process. This includes bringing operations leadership to the top table, involving them in globalization strategies and leveraging supply chain skills to raise performance across the organization.

– Mitigate execution risk through continuous planning and measurement. This includes assigning responsibilities early on, crafting a clear road map, tracking appropriate metrics related to operational synergies and prioritizing initiatives.

– Do not underestimate technology efforts. Successful technological support for a merger or acquisition includes robust planning for IT infrastructure and networks as well as the involvement of supply chain leadership in planning for IT. Global growth will continue to be a strategic focus for many Indian companies, and merger and acquisition is a legitimate strategy to achieve this goal. However, sustainable growth also requires an emphasis on operational synergies. This requires adequate attention to organizational models that will enable effective and integrated operations across merged entities and geographics.

## Conclusion:

This study proves that merges have failed to contribute positively in the performance of the company, especially for the sample under consideration. It neither provides economies of scale nor synergy effect. When overall impact (*i.e.* ROCE), was calculated mergers were failed to provide any positive contribution here also. In fact, these results are not surprising. They are in line with what was expected on the basis of literature survey.

But still here the study would like to add one thing. There are numerous motives that motivate a company to enter the merger activities. Some times these motives are qualitative and cannot be interpreted into quantitative figures. Again, a merger may be effective or successful to deliver the immediate objective but may be failed to deliver all the theoretically defined benefits. So, it will be fallacious to assume, on the basis of this study, that overall mergers do not contribute anything to the companies and it is a useless exercise. The overall conclusion is that the analysis of this study supports the findings of existing research that the acquirer companies always benefited more than the target companies in the merger event.

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