# A STUDY ON THE SHORT-RUN PROFITABILITY OF ACQUIRER FIRMS IN INDIA

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## ABSTRACT

*Corporate merger and acquisitions (M&As) reached their peak in the twenty-first century. The M&As have become one of the competitive strategies for external growth. In general, it is believed that M&As can create synergies. Much of the research has focused on performance evaluation, shareholder equity allocation, or even the increase of company market value after the M&As. The present study is impact of business restructuring on the profitability: An empirical analysis with special focus on Chemical Industry in India with a sample of 10 chemical firms listed in one of the leading Indian stock exchanges namely Bombay Stock Exchange out of 23 firms which have undergone M&As in the same industry during 2007. A comparison of the post-merger performance of the sample acquirer firms by use of profitability measures (gross profit ratio, operating profit ratio and net profit ratios) and paired 't' test during the study period of three years before and three years after the period of M&As. The study proves that the Chemical Industry's overall profitability is significantly increased after the merger supported by't' test.*

***Keywords**: Acquisition; Business Restructuring; Corporate Restructuring; Merger; Merger & Acquisition; Post-Merger Profitability; Short-Run Profitability; Profitability of Chemical Industry.*

### Introduction:

The phrase mergers and acquisitions (abbreviated M&As) refers to the aspect of corporate strategy, corporate finance and management dealing with the buying, selling and combining of different companies that can aid, finance, or help a growing company in a given industry grown rapidly without having to create another business entity.

### Review of Literature:

Rogowaski and Simonson (1987) found that the target-acquirer asset size differential, the target loans to earning assets ratio, and the target ratio of bonds over five years in maturity to total assets were positively related to the merger premium, whereas the target capital-to-asset ratio was negatively related to the merger premium. Pramod Mantravadi and Vidyadhar Reddy (2008) found that banking and finance industries, the pharmaceuticals, textiles and electrical equipment sectors saw a marginal negative impact on operating performance (in terms of profitability and returns on investment). For the Chemicals and Agri-products sectors, *M&As* had caused a significant decline, both in terms of profitability margins and returns on investment and assets. Rajesh Kumar and Panneerselvam (2009) indicated that *M&As* are positive net present value activities for bidding and target firms. The average announcement day excess returns was found to be highest for target firms involved in mergers, followed by acquirer firms involved in mergers. Muhammad Usman Kemal (2011) found that the financial performance of Royal Bank of Scotland in the areas of profitability, liquidity, assets management, leverage, and cash flows has been quite satisfactory before the merger deal. It means that the merger deal fails to improve the financial performance of the bank. Akben-Selcuk, Altiok-Yilmaz (2011) investigated the impact of *M&A* deals on the performance of acquirer Turkish companies found that both the stock market and accounting data weakly support the hypothesis that acquirer companies are negatively affected by *M&A* activities.

### Research Methodology:

#### Statement of the Problems and Scope of the Study:

When a firm gets merged with other or acquired by the profit making firm, it benefits for both the firms, hence

**Forms of Integration**

| | | |
|---|---|---|
| **1.** | **Statutory Merger** | Acquiring company acquires all of the target's assets and liabilities; thereby the smaller target ceases to exist. |
| **2.** | **Subsidiary Merger** | Target company becomes subsidiary of the acquirer when target has stronger brands associated with it. The acquirer may choose to continue target as a subsidiary than consolidating into acquirer's whole business entity. |
| **3.** | **Consolidation** | Both companies cease to exist and form a different company. When two equal partners in size merge, they consolidate into one new company. |

**Types of Mergers**

| | |
|---|---|
| **1.** | Horizontal Merger - when two competitors in similar / same business merge together. |
| **2.** | Vertical Merger – when acquirer moves upwards (towards consumer service) or downwards (towards raw material supplier) in the supply chain to acquire target firm. |
| **3.** | Conglomerate Merger - merger between two companies from two different industries. Often synergies realized from these mergers are very little than diversifying the revenue stream. |

**Motivations For Mergers**

| | |
|---|---|
| 1. | **Synergies**: combined company worth more than individual companies. Cost reduction is major reason for horizontal mergers. Reduced competition, cross selling products, increased markers, and pricing power are parts of the synergies realized during mergers. In micro economic sense, reduction in fixed costs (eliminating duplicating costs like IT infrastructure, R&D, marketing, sales force reduction); average total cost per unit produced is reduced thereby realizing economies of scale. |
| 2. | **Rapid Growth**: revenue growth can be achieved much faster through merger than organic growth. This is more common in the matured firms. |
| 3. | **Increased Market Power**: In horizontal mergers it is less competition after the merger and thereby increased pricing power. In vertical mergers, there is less reliance on suppliers and vendors, and increased product quality. |
| 4. | **Acquire Unique Capabilities**: Best business practices can be learned from target resources and can leverage knowledge base associated with target firm. |
| 5. | **Diversification of Cash Flow**: This can be realized during conglomerate mergers, often not beneficial for shareholders. Instead, shareholders can buy different company socks for themselves. |
| | **Bootstrapping EPS**: When high PE acquirer purchases low PE target firm with stock then PE for acquirer will go lower after the merger. |
| | **Personal Benefits for Agents**: salaries of executives are highly correlated with size of the company, thereby great incentive for mergers at the expense of shareholders and employees. |
| | **Tax Benefits**: when acquired a target with large taxable income with carry forward tax liabilities, acquirer can use tax liabilities to offset taxable income. |
| | **Unlocking Hidden Value**: acquirer may buy struggling company and reorganize to take advantage of hidden value of assets. |

now-a-days all firms are interested in resorting to corporate restructuring in the form of *M&A*. However, the question often arises whether all the firms that are merged / acquired are ending up with maximization of shareholders' wealth and thereby improve operating performance? Because, in some firms, the shareholders' wealth gets reduced after it get merged / acquired. Therefore, the present study is proposed to seek answers to the stated question by analysing the impact of *M&A* on the sample of 10 firms out of 23 firms listed in one of the leading Indian stock exchanges namely *Bombay Stock Exchange* which have undergone *M&A* in the during the period 2007, and attempted to study the profitability of the acquirer corporate firms in chemical industry in India in the short run, that is during the study period of three years before and after the period of merger, that is from 2004 to 2006, and 2008 to 2010, hence the period of the study is six years.

**Objectives of the Study and Hypotheses Development:**

Considering the limited research works on *M&As* in Indian corporate firms, the present study is aimed at measuring the *profitability* of firms of chemical industry which went through *M&As* during the study period. The study is attempted to measure and test if there is any significant deviation in the results arrived by the earlier researches in *M&As* in chemical industry in India in terms of short-run post- merger profitability.

**Table 1: M&A Deals Announced in Chemical Industry in India during 2007**

| S. No. | Acquirer Firms | Target Firms |
|---|---|---|
| 1. | Shiva Fertilizers Ltd. | Parvati Fertilizers Ltd. |
| 2. | Coromandel Fertilisers Ltd. | Godavari Fertilisers and Chemicals Ltd. |
| 3. | Khaitan Chemicals & Fertlizers Ltd. | Shobhan Enterprises Pvt. Ltd. |
| 4. | Reliance Industries Ltd. | IPCL |
| 5. | Goa Carbon Ltd (GCL) | Paradeep Carbons Ltd. |
| 6. | Indian Oil Corporation | IBP's Petroleum Retail Business |
| 7. | Regency Ceramics Ltd. | Regma Ceramics Ltd. |
| 8. | Rain Commodities Ltd. | CII Carbon |
| 9. | Regency Ceramics Ltd. | Regma Ceramics Ltd. |
| 10. | Wipro Ltd. | Unza Holdings Ltd. |
| 11. | IKF Technologies Ltd. | Gujarat Oleo Chemical Ltd. |
| 12. | Indoco Remedies | La Nova Chemical India Pvt. Ltd. |
| 13. | Bodal Chemicals Ltd. | Milestone Organic Ltd. (MOL) |
| 14. | Sun Pharmaceutical Industries | Taro Pharma |
| 15. | Aurobindo Pharma Ltd. | APL Life Sciences Ltd. |
| 16. | Wanbury Ltd. | Pharmaceutical Products of India Ltd. |
| 17. | BPCL | Kochi Refineries Ltd. |
| 18. | Reliance Industry | Indian Petrochemicals Corporation |
| 19. | Kochi Refineries Ltd | BPCL |
| 20. | Excel Crop Care Ltd | Business Units Of Excel Industries Ltd. |
| 21. | United Breweries | Whyte and Mackay |
| 22. | United Spirits Ltd. | Shaw Wallace & Co. Ltd. |
| 23. | Solar Industries India Ltd. | Solar Capital Ltd. |

Source: Compiled & edited from the financial statements of selected firms listed-CMIE-prowess package.

**Table 2: Sample Acquirer Firms (*Chemical Industry*) in India during 2007**

| SI. No. | Acquirer Firms | Target Firms |
|---|---|---|
| 1 | Aurobindo Pharma Ltd. | APL Life Sciences Ltd. |
| 2 | Bodal Chemicals Ltd. | Milestone Organic Ltd. (MOL) |
| 3 | Coromandel Feartilisers Ltd. | Godavari Fertilisers and Chemicals Ltd. |
| 4 | Excel Crop Care Ltd. | Business Units Of Excel Industries Ltd. (EIL) |
| 5 | Goa Carbon Ltd. | Paradeep Carbons Ltd. |
| 6 | I K F Technologies Ltd. | Gujarat Oleo Chemical Ltd. |
| 7 | Indian Oil Corporation Ltd. | IBP's Petroleum Retail Business |
| 8 | Indoco Remedies Ltd. | La Nova Chem India Pvt. Ltd. |
| 9 | Rain Commodities Ltd. | CII Carbon |
| 10 | Wipro Ltd. | Unza Holdings Ltd. |

*Source: Compiled & edited from the financial statements of selected firms listed-CMIE-prowess package.*

**TABLE 3: Description of Various Measures Used for Analysis**

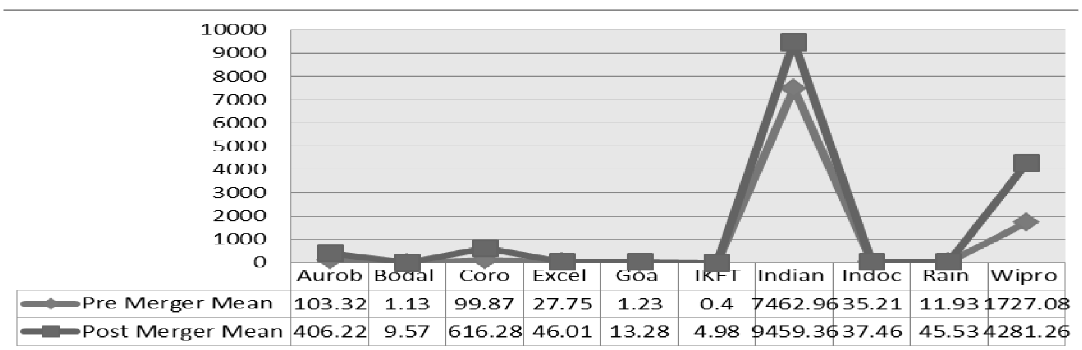
| SI. No. | Ratios | Measure | Description |
|---|---|---|---|
| **1.** | Operating Profit Ratio | Operating Profit x 100<br>Income | Relation between operating profit to income. |
| **2.** | Gross Profit Ratio | Gross Profit x 100<br>Income | Relation between gross profits to income. |
| **3.** | Net Profit Ratio | Net Profit x 100<br>Income | Relation between net profits to income. |

**Table 4: Impact of *M&A* on *Operating Profit* of Acquiring Firms**

| Si. No. | Name of The Firms | Pre-Merger | | Post-Merger | | | T-Value | P-Value |
|---|---|---|---|---|---|---|---|---|
| | | Mean | Sd | Mean | Impact | Sd | | |
| **1.** | Aurobindo | 103.32 | 65.18 | 406.22 | + | 278.05 | -1.93 | .193 |
| **2.** | Bodal | 1.13 | 8.17 | 9.57 | + | 23.05 | -0.66 | .577 |
| **3.** | Coromandel | 99.87 | 23.91 | 616.28 | + | 251.00 | -3.90 | .060* |
| **4.** | Excel Crop. | 27.75 | 10.17 | 46.01 | + | 10.52 | -4.62 | .044** |
| **5.** | Goa Carbon | 1.23 | 2.45 | 13.28 | + | 9.68 | -1.77 | .217 |
| **6.** | IKF Tech. | 0.40 | 0.56 | 4.98 | + | 1.18 | -11.47 | .008*** |
| **7.** | Indian Oil | 7462.96 | 1998.58 | 9459.36 | + | 4860.40 | -0.74 | .536 |
| **8.** | Indoco | 35.21 | 5.53 | 37.46 | + | 5.20 | -0.77 | .520 |
| **9.** | Rain | 11.93 | 32.76 | 45.53 | + | 202.50 | -0.30 | .787 |
| **10.** | Wipro | 1727.08 | 658.72 | 4281.26 | + | 1260.56 | -5.76 | .029** |

Source: Compiled & edited from the financial statements of selected firms listed-CMIE-prowess package. *Significant at 10% level: **Significant at5% level; ***Significant at 1% level.

**Chart – A: Impact of *M&A* on *Operating Profit* of Acquiring Firms**




*Source: Complied & edited from the financial statements of selected firms listed-CMIE-prowess package.*

Based on the objectives of the study the following hypothesis is developed:
Ho: *"There is no significant improvement on the short-run post-merger profitability of acquirer firms of chemical industry in India"*

**Sources of Data Collection And Sampling Design:**

**Data Collection:**

The study used secondary data, which were collected from the capital market database called *Centre for Monitoring Indian Economy Private Limited (Prowess CMIE).* Data on profitability ratios for three years prior to and three years after the *M&A* activity for each acquiring firm in the sample was collected from Prowess database of *CMIE*. *Table 1* shows the list of deals announced for *M&A* during the calendar year 2007.

**Sampling Design:**

The sample (corporate firms) of 10 firms in chemical industry out of 23 firms listed in one of the leading Indian stock exchanges namely ***Bombay Stock Exchange***, which

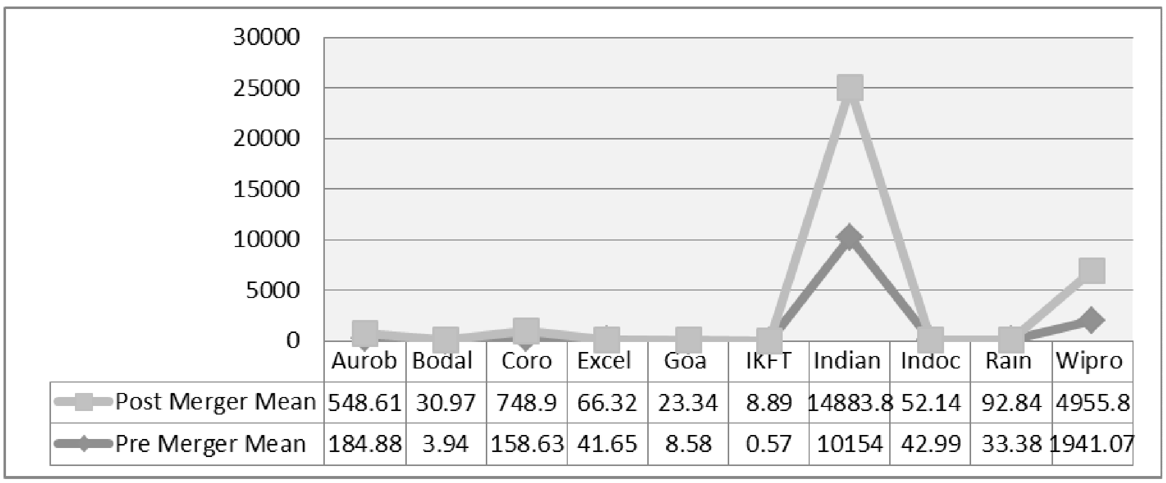
**Table 5: Impact of M&A on Gross Profit of Acquiring Firms**

| SI. No. | Name of The Firms | Pre-Merger | | Post – Merger | | | t-value | p-value |
|---|---|---|---|---|---|---|---|---|
| | | Mean | SD | Mean | Impact | SD | | |
| 1 | Aurobindo | 184.88 | 58.92 | 548.61 | + | 279.45 | -2.46 | 0.132 |
| 2 | Bodal | 3.94 | 9.77 | 30.97 | + | 25.38 | -2.27 | 0.151 |
| 3 | Coromandel | 158.63 | 22.63 | 748.90 | + | 260.63 | -4.23 | 0.052* |
| 4 | Excel Crop. | 41.65 | 9.01 | 66.32 | + | 11.05 | -13.60 | 0.005*** |
| 5 | Goa Carbon | 8.58 | 6.13 | 23.34 | + | 9.88 | -1.59 | 0.251 |
| 6 | IKF Tech. | 0.57 | 0.64 | 8.89 | + | 1.05 | -19.84 | 0.003*** |
| 7 | Indian Oil | 10154 | 1763.50 | 14883.80 | + | 3859.88 | -2.20 | 0.158 |
| 8 | Indoco | 42.99 | 8.11 | 52.14 | + | 5.72 | -4.76 | 0.041** |
| 9 | Rain | 33.38 | 58.77 | 92.84 | + | 223.18 | -0.48 | 0.674 |
| 10 | Wipro | 1941.07 | 728.52 | 4955.80 | + | 1278.80 | -7.62 | 0.017** |

Source: Compiled & edited from the financial statements of selected firms listed-CMIE-prowess package. *Significant at 10% level: **Significant at5% level; ***Significant at 1% level.

$$\text{Operating Profit Ratio (OPR)} = \frac{\text{Operating Profit}}{\text{Income}} \times 100$$

**Chart – B: Impact of *M&A* on *Gross Profit* of Acquiring Firms**




Source: Complied & edited from the financial statements of selected firms listed-CMIE-prowess package.

have undergone ***M&A*** in the chemical industry during the period 2007 are drawn based on the comprehensive list provided by the Prowess database of ***CMIE*** package (*see table* 2).

**Research Methods for Data Analysis:**

Pre-merger and post-merger profitability ratios are computed and the averages calculated for the entire set of sample firms are used for analysis. The average ratios for each chemical firm is also computed in addition to computation of average pre-merger and post-merger profitability ratios to study if there was any statistically significant change in profitability due to M&A, using "paired two sample t-test".

Paired t test for difference of two means is

$$t = \frac{|\bar{d}|}{S / \sqrt{n}} \sim t_{n-1}\, dt$$

Whei

$$S = \sqrt{\frac{\Sigma (d - \bar{d})^2}{n - 1}}$$

**Analysis And Results of Short-Run Post-Merger Profitability of Acquirer Firms of Chemical Industry In India:**

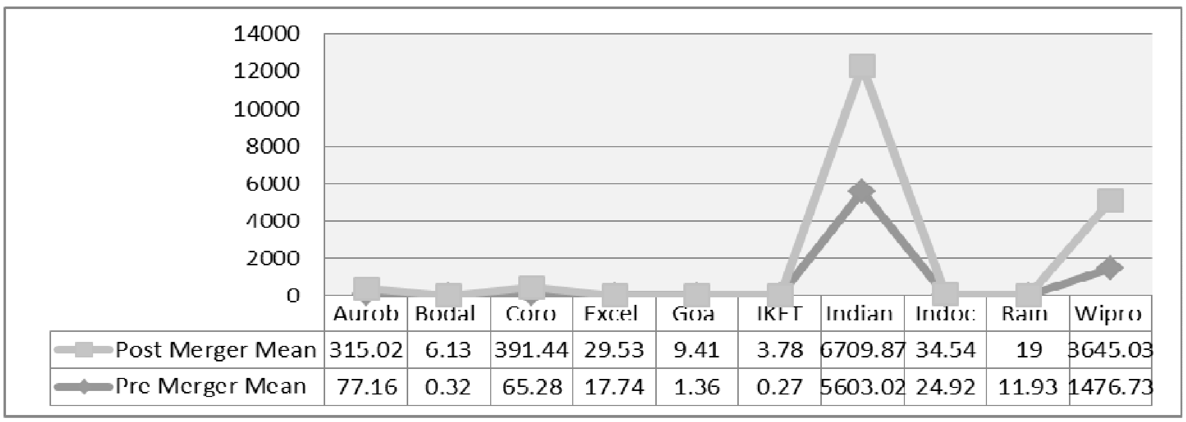
The profitability of the selected acquirer firms in respect of their operating profit, gross profit and net profit ratios

**Table 6: Impact of *M&A* on *Net Profit* of Acquiring Firms**

| SI. No. | Name of the firms | Pre-Merger | | Post-Merger | | | t-value | p-value |
|---|---|---|---|---|---|---|---|---|
| | | Mean | SD | Mean | Impact | SD | | |
| **1.** | Aurobindo | 77.16 | 46.46 | 315.02 | + | 199.71 | -2.14 | .166 |
| **2.** | Bodal | 0.32 | 6.79 | 6.13 | + | 14.93 | -0.69 | .560 |
| **3.** | Coromandel | 65.28 | 20.50 | 391.44 | + | 157.97 | -4.04 | .056* |
| **4.** | Excel Crop. | 17.74 | 6.47 | 29.53 | + | 7.19 | -3.78 | .063* |
| **5.** | Goa Carbon | 1.36 | 2.47 | 9.41 | + | 7.95 | -1.37 | .304 |
| **6.** | IKF Tech. | 0.27 | 0.39 | 3.78 | + | 1.38 | -5.71 | .029** |
| **7.** | Indian Oil | 5603.02 | 1213.40 | 6709.87 | + | 3641.90 | -0.51 | .661 |
| **8.** | Indoco | 24.92 | 3.56 | 34.54 | + | 6.56 | -4.43 | .047** |
| **9.** | Rain | 11.93 | 32.76 | 19.00 | + | 178.12 | -0.07 | .948 |
| **10.** | Wipro | 1476.73 | 553.03 | 3645.03 | + | 1086.02 | -5.36 | .033** |

Source: Compiled & edited from the financial statements of selected firms listed-CMIE-prowess package. *Significant at 10% level: **Significant at5% level; ***Significant at 1% level.

**Chart- C: Impact of M&A on Net Profit of Acquiring Firms**




Source: Complied & edited from the financial statements of selected firms listed-CMIE-prowess package.

**Table 7: "t" Value of Impact of *M&A* on Short-run Profitability of *Chemical Industry* in India**

| SI. No. | Acquirer Firms | OPR | GPR | NPR |
|---|---|---|---|---|
| **1.** | Aurobindo | *NS* | *NS* | *NS* |
| **2.** | Bodal | *NS* | *NS* | *NS* |
| **3.** | Coromandel | * | * | * |
| **4.** | Excel Crop. | ** | *** | * |
| **5.** | Goa Carbon | *NS* | *NS* | *NS* |
| **6.** | IKF Tech. | *** | *** | ** |
| **7.** | Indian Oil | *NS* | *NS* | *NS* |
| **8.** | Indoco | *NS* | ** | ** |
| **9.** | Rain | *NS* | *NS* | *NS* |
| **10.** | Wipro | ** | ** | ** |

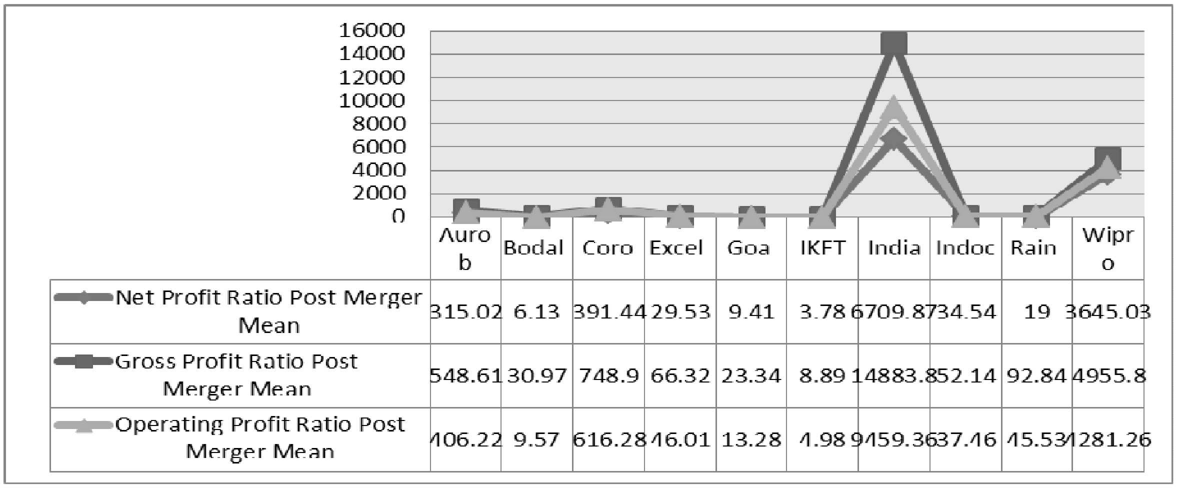
Source: Complied & edited from the financial statements of selected firms listed-CMIE-prowess package.

after merger has been compared to that of the before merger using t-test and the results of the analysis are presented from tables 3 to 6. To measure the impact of M&A on the short-run profitability of the acquirer firms, appropriate profitability ratios viz. operating profit ratio (OPR), gross profit ratio (GPR) and net profit ratio (NPR) are used (see table 3).

**Operating Profit Ratio (OPR):**

The OP or loss is made by an industry from its business activities in a given period. This is further reduced or

**Chart – D : Trend of Mean of *OPR*, *GPR* and *NPR* of Acquiring Firms of Chemical Industry in India**




Source: Complied & edited from the financial statements of selected firms listed-CMIE-prowess package.

augmented by adding the business overheads and any ancillary investments to arrive at the profit (loss) before interest and tax (PBIT). The net operating income includes net interest income and non-interest income and non-interest expenses.

$$\text{Operating Profit Ratio (OPR)} = \frac{\text{Gross Profit}}{\text{Income}} \times 100$$

The *OPR* is increased after merger for all the firms chosen for the study (10 out of 10) (*see table 4and chart-A*). However, the increase in *OPR* is significant for four firms only viz., IKF Technologies Ltd, Excel Crop Care Ltd, Wipro Ltd. and Coromandel Fertilisers Ltd with -t = 11.47, P< 0.01; -t = 4.62, P< 0.05; -t = 5.76, P< 0.05 and –t = 3.90, P< 0.10 at one per cent, five per cent (each for two firms) and 10 per cent level respectively. Hence, it is inferred that there has been a significant increase in *OP* of four acquirer firms after merger although there has been an increase in *OPR* for 10 acquirer firms after merger. This is a good significant positive impact of *M&A* on the short-run post-merger operating profit of acquirer firms of chemical industry in India.

**Gross Profit Ratio (*GPR*):**

The gross profit or loss is made by an industry from its business activities in a given period. This is further reduced or augmented by adding the business overheads and any ancillary investment to arrive at the profit (loss) before depreciation, interest and tax (*PBDIT*).

The *GPR* is increased after merger for all the sample firms (10 out of 10) (*see table 5* and *chart- B*). However, the increase in *GPR* is significant for five firms only viz., Excel Crop Care Ltd, IKF Technologies Ltd, Indoco Remedies, Wipro Ltd, and Coromandel Fertilisers Ltd. with -t = 13.60 P< 0.01; -t = 19.84 P< 0.01; -t = 4.76P< 0.05; -t = 7.62P< 0.05, and -t = 4.23P< 0.10 at one per cent (each for 2 firms), five per cent (each for 2 firms), and 10 per cent (for 1 firm) level respectively. Hence, it is inferred that there has been a significant increase in *GP* of five acquirer firms after merger although there has been an increase in *GPR* for 10 acquirer firms after merger. This is also a good significant positive impact of *M&A* on the short-run post-merger gross profit of acquirer firms of chemical industry in India.

**Net Profit Ratio (*NPR*):**

The *NPR* establishes a relationship between net profit (after tax) and income. It indicates overall efficiency of the firms in an industry. If the profit is not sufficient, the firm will not be able to achieve satisfactory *ROI*.

$$\text{Operating Profit Ratio (OPR)} = \frac{\text{Net Profit}}{\text{Income}} \times 100$$

The *NPR* is increased after merger for all the sample firms (10 out of 10 firms) (*see table 6 and chart-C*). However, the increase in *NPR* after merger is statistically significant for five firms only viz., IKF Technologies Ltd, Indoco Remedies, Wipro Ltd, Coromandel Fertilisers Ltd, and Excel Crop Care Ltd with - t = 5.71, P< 0.05; -t =4.43, P< 0.05; -t= 5.36, P< 0.05; -t = 4.04, P< 0.10 and –t = 3.78, P< 0.10 at five per cent (each for 3 firms), and 10 per cent (each for 2 firms) level respectively. Hence, it is inferred that there has been a significant increase in *NPR* of five acquirer firms after merger although there has been an increase in *NPR* for 10 acquirer firms after merger. This is also a good significant positive impact of *M&A* on the short-run post-merger net profit of acquirer firms of chemical industry in India.

Based on the results of the analysis, the hypothesis *"there is no significant impact on the short-run post-merger profitability of acquirer firms of Chemical Industry in India"* is rejected.

**Key Observations:**

The OPR, GPR and NPR ratios are used for measuring the short-run post-merger profitability of Chemical Industry in India. The study reveals that there has been a significant increase in short-run post-merger OPR of four acquirer firms, GPR of five acquirer firms, and NPR of five acquirer firms although there has been an increase in OPR, GPR and NPR for all the sample firms (10 out of 10) on the profitability. This shows that there is a significant positive impact of M&A on the

## APPENDIX

**Profitability Measures (Profitability Ratios) of Selected Firms of Chemical Industry Merged during 2007**

| | | Operating Profit Ratio | | | | | | Gross Profit Ratio | | | | | | Net Profit Ratio | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Pre Merger Time | | | Post Merger Mean | | | Pre Merger Time | | | Post Merger Mean | | | Pre Merger Time | | | Post Merger Mean | | |
| Sl. No. | Name of the | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | Aurobindo | 233.41 | 119.32 | 201.91 | 467.67 | 318.57 | 859.61 | 172.45 | 42.97 | 94.55 | 344.84 | 163.99 | 709.85 | 127.03 | 35.08 | 69.38 | 290.78 | 128.54 | 525.76 |
| 2 | Bodal | -2.45 | -0.92 | 15.19 | 38.98 | 2.55 | 51.39 | -4.79 | -2.28 | 10.46 | 24.71 | -16.96 | 20.98 | -4.79 | -2.28 | 8.03 | 15.45 | -11.1 | 14.04 |
| 3 | Coromandel | 133.99 | 163.42 | 178.49 | 454.18 | 949.03 | 843.49 | 72.63 | 109.59 | 117.4 | 332.22 | 808.18 | 708.44 | 43.11 | 69.19 | 83.55 | 209.76 | 496.38 | 468.2 |
| 4 | Excel Crop. | 31.28 | 46.08 | 47.6 | 54.23 | 68.85 | 75.9 | 16.01 | 33.91 | 33.34 | 36.3 | 44.54 | 57.2 | 10.29 | 21.93 | 21.02 | 23.36 | 27.8 | 37.44 |
| 5 | Goa Carbon | 5.94 | 4.21 | 15.59 | 28.3 | 29.76 | 11.96 | 1.45 | -1.33 | 3.57 | 19.28 | 18.46 | 2.11 | 0.81 | -0.79 | 4.06 | 15.49 | 12.33 | 0.41 |
| 6 | IKF Tech. | 0.12 | 0.28 | 1.31 | 7.69 | 9.3 | 9.68 | -0.01 | 0.17 | 1.05 | 3.79 | 5.01 | 6.16 | -0.01 | 0.11 | 0.72 | 2.29 | 4.04 | 5.02 |
| 7 | Indian Oil | 12035.76 | 8539.2 | 9886.94 | 14534.37 | 11210.54 | 18906.55 | 9729.71 | 5954.43 | 6704.74 | 10092.8 | 4313.31 | 13972.02 | 7004.07 | 4890.63 | 4914.36 | 6961.66 | 2948.6 | 10219.35 |
| 8 | Indoco | 34.34 | 44.2 | 50.43 | 47.24 | 50.75 | 58.43 | 29.08 | 36.74 | 39.83 | 35.6 | 33.45 | 43.34 | 21.26 | 25.13 | 28.38 | 30.1 | 31.44 | 42.09 |
| 9 | Rain | 101.25 | -0.78 | -0.31 | 179.86 | 259.41 | -160.74 | 49.2 | -1.09 | -12.32 | 121.29 | 199.24 | -183.93 | 49.2 | -1.09 | -12.32 | 85.05 | 154.67 | -182.72 |
| 10 | Wipro | 1212.5 | 1941.17 | 2669.55 | 4095.5 | 4346.6 | 6425.3 | 1057.38 | 1749.63 | 2374.25 | 3522.6 | 3584.8 | 5736.4 | 914.88 | 1494.82 | 2020.5 | 3063.3 | 2973.8 | 4898 |

Source: Complied & edited from the financial statements of selected firms listed-CMIE-prowess package.

short-run post-merger profitability of acquirer firms of chemical industry in India.

### Concluding Remarks:

The objective of this paper is to test the hypothesis that *M&As* in India have helped firms to perform better in the short run. Our hypothesis that *M&As in Chemical Industry in India have resulted in improved short-term post-merger firms' profitability* stands validated through this study. Hence, we conclude that, on an average, merging firms of chemical industry in India appear to have performed better financially after the merger when compared to that of their profitability in the pre-merger period. This improvement in profit can be attributed to the merger. Enhanced efficiency of utilization of their assets by the merged firms appears to have led to the generation of higher operating cash flows. Synergistic benefits appear to have accrued to the merged entities due to the transformation of the uncompetitive, fragmented nature of chemical firms in Indian before merger, into consolidated and operationally more viable business units. What this study thus indicates is that in the short run, *M&As* appear to have been financially and operationally beneficial for firms of Chemical Industry in India.

- The profitability of Chemical Industry in India is increased after the merger and this is supported by t- test. Hence, we conclude that the *OP, GP* and *NP* are improved in short-run post-merger during the study period.

### Limitations of The Study:

The study is mainly based on secondary data, which are limited 10 firms of chemical industry only out of 23, which have undergone ***M&As*** during 2007. In the absence of more reliable data, CMIE data on ***M&As*** are used in this study. Further, the study is undertaken for the pre-merger period of three years and post-merger period of three years only, leaving a lengthy coverage of period for want of studying the immediate impact of merger as it was aimed for measuring the short-run post-merger profitability.

### Scope For Further Studies:

- Studies with similar objectives could be made from time to time covering a long-term period.
- The stock index price improvement could be analyzed for pre-merger and post-merger period.
- Researchers could also analyse the post-merger returns to shareholders of acquiring firms involved in ***M&As*** in India, to correlate with findings of studies indicating poor post-merger performance.
- Important implications for research concerning ***M&As*** are to be taken care of for the integration issues into consideration along with the human factors.

### References:


[1] Akben-Selcuk E. and Altiok-Yilmaz A. (2011), "The impact of mergers and acquisitions on acquirer performance: Evidence from Turkey", Business and Economics Journal, Vol. BEJ-22 pp 1-8.

[2] Muhammad Usman Kemal (2011), "Post-merger profitability: A case of Royal Bank of Scotland (RBS)", International Journal of Business and Social Science, Vol. 2 No. 5 pp 157-62.

[3] Pramod Mantravadi and Vidyadhar Reddy A. (2008), "Post-merger performance of acquiring firms from different industries in India", International Research Journal of Finance and Economics Issue 22. pp 192-204.

[4] Rajesh Kumar B and Panneerselvam S. (2009), "Mergers acquisitions and wealth creation: A comparative study in the Indian context", IIMB Management Review, September, pp 222-44.

[5] Rogowaski R and Simonson D. (1987), "Bank merger pricing premiums and interstate bidding", Paper presented at the Financial Management Meetings in Las Vegas.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