**Evaluating the Impact of Mergers and Acquisitions on Acquirer Companies: A Comparative Study of Pre and Post-Financial Performance in Selected M&A Deals in India.**

**Abstract:**

Over the years, mergers and acquisitions have become the most popular means of inorganic expansion for companies and are extensively used to restructure business organizations. Companies undertake these activities based on strategic business motivations, which are primarily economic in nature. The objective of this research study is to evaluate the impact of the pre and post-financial performance of acquirer companies. The study will compare the pre-merger and post-merger performance of acquirer companies in selected M&A deals in India during two periods: 2007-2008, which was chosen due to the 2008 global financial crisis, and 2012-2013, during which many deals took place after 2010 and then again in 2012-2013. The study will use selected financial ratios and a paired t-test with a 5% significance level.

**Keywords:** ***Mergers And Acquisitions, Inorganic Expansion, Business Organizations, Strategic Business Motivations, Economic Impact, Pre-Merger Performance, Post-Merger Performance, Acquirer Companies, M&A Deals, India, Global Financial Crisis, Financial Ratios***

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**Introduction:**

Mergers and acquisitions (M&A) are corporate strategies that involve the consolidation of two or more companies into a single entity. A merger occurs when two companies agree to combine their operations and assets to form a new company, whereas an acquisition involves one company buying another company's assets or shares.

M&A activities have become increasingly popular in recent years as companies seek to expand their business and improve their competitiveness. These activities are often driven by strategic business motivations such as access to new markets, diversification of products or services, and cost savings through economies of scale. In some cases, M&A can also be used to acquire key technologies or intellectual property that can help a company stay ahead of its competitors.

However, M&A can also be a risky endeavor, as they often involve significant financial investments and potential operational challenges. Companies need to carefully evaluate the potential benefits and risks of M&A before proceeding with any transactions. Additionally, the success of M&A activities is often determined by the ability of the acquirer company to integrate the acquired assets or companies into its existing operations.

During an M&A deal, both sides have different ideas about the worth of a target company. The seller wants to value the company at a high price, while the buyer would try to get the lowest possible price. There are several legitimate ways to value companies, with the most common being to look at comparable companies in an industry. Deal makers implement a variety of other methods and tools to assess a target company, including comparative ratios such as Price-Earnings Ratio (P/E Ratio) and Enterprise-Value-to-Sales Ratio (EV/Sales). Additionally, some use Replacement Cost or Discounted Cash Flow (DCF) analysis to determine a company's current value according to its estimated future cash flows.

Additional Cost:

The additional cost that acquiring companies pay on the stock market value of the companies they intend to buy is commonly referred to as a "premium for potential success". This premium is often justified by the concept of synergy, where a merger benefits shareholders by increasing the post-merger share price to the value of potential synergy. In most cases, rational owners would not sell if they would benefit more by not selling, and this means that buyers would have to pay a premium if they hope to acquire the company. For sellers, the premium represents their company's future prospects, while for buyers, the premium represents a portion of the post-merger synergy they expect to achieve.

Mergers and acquisitions are typically driven by strategic business motivations that are economic in nature. These include leveraging economies of scale, widening distribution capabilities or newer markets to augment market share, diversifying the range of products and services, acquiring professional leadership, and surviving macro-environmental headwinds. Other factors such as achieving pricing efficiency in the supply chain and excluding future competition may also be included. Mergers and acquisitions have led to the internationalization of business operations and have been increasingly used as a fast and effective consolidation strategy, particularly in the cross-border landscape. The primary driver behind mergers and acquisitions is to maximize shareholder value, which can be achieved by increasing profits through cost efficiency, economies of scale and scope, vertical integration, and synergies. In recent times, mergers and acquisitions have been used as a solution for highly leveraged companies seeking to reduce debt by selling assets, particularly after 2015 when the banking sector became stricter in lending.

**Objective of the study:**

The objective is twofold: first, to assess how M&A activities affect the operating efficiency of the acquirer, and second, to comprehend the impact of the merger on the acquirer's performance, taking into account the macroeconomic environment.

**Literature Review:**

In Amish Bharat Kumar Soni's paper, the financial analysis impact of the acquired company is highlighted, and the paper also examines the analysis of shareholders' wealth as a short-term investment. Harpreet Singh Bedi's paper delves into the trends and progress of M&A activities in India and considers various factors that have facilitated the progress and execution of such activities. Viral Upendrabhai Pandya's paper aims to measure the mergers and acquisitions sector of India from 1991 to 2010, using time-series data and recent worldwide developments, to categorize trends in the manufacturing and non-manufacturing sectors and provide evidence for the motives and reasons behind observed behavior and the prospective future of M&A activity in India. Rabi Narayan Kar and Amit Soni's paper emphasizes mergers as a strategy to enhance enterprise value, analyzing the period post-liberalization to examine the impact of mergers. Agnihotri investigates and analyzes the determinants of acquisitions in three industries in India and finds that the volatility of earnings and business group affiliation significantly influences acquisitions by Indian firms, with a focus on increased earnings due to acquisitions. In Erel, Liao, & Weisbach's paper, acquisitions occur when the perceived advantage in the form of production efficiencies, market power, and tax considerations is higher for combined entities than pre-acquisition. The researcher suggests in the paper that a firm should perceive sufficient benefits from a cross-border acquisition before pursuing an international acquisition strategy. Kumar discusses the transformation of Hindalco, an Indian aluminum producer, into one of the world's largest aluminum manufacturers, suggesting that while firms from developed countries use M&A for cost saving and size synergies, emerging market firms are motivated by a strategy to acquire competencies, brands, know-how, and technology that could transform them into global leaders. As emerging market M&A activities are not driven by the desire for cost-saving or downsizing, integration is smoother and less disruptive.

**Research Methodology:**

For the study, Indian companies that underwent mergers and acquisitions during 2007-2008 and 2012-2013 will be selected. The analysis will focus on the selected acquiring companies, and secondary data for both pre-merger and post-merger periods spanning 3 years will be used. The study will evaluate the impact of the mergers and acquisitions on the operating efficiency of the companies by considering relevant ratios.

**Hypothesis:**

The study will test the following hypotheses:

H0: There is no significant difference in the mean efficiency ratio of the selected acquiring company before and after the merger.

H1: There is a significant difference in the mean efficiency ratio of the selected acquiring company before and after the merger.

To test these hypotheses, a t-test will be conducted to evaluate the impact of the mergers on the operating efficiency of the company. The test will be conducted at a 5% level of significance.

**Data and Methodology:**

The analysis focuses on cross-border Mergers and Acquisitions involving Indian companies that took place between 2007-08 and 2012-13. The chosen period of 2007-08 coincides with the global recession, while 2012-13 is marked by significant corporate deals. The following M & A deals have been selected for the study: DrReddys Laboratories-Betapharm, Colgate-Palmolive, Tata Motors-Jaguar, Suzlon-RE Power, ONGC-Imperial, Hindalco-Novelis, Tata Steel-Corus, HDFC-Centurion BOP, Reliance Industries-IPCL, Indian oil Corp-IBP, and JSW-SISCOL.

**a) Total Asset Turnover:** This ratio is calculated by dividing net sales by average total assets, and it measures a company's assets' ability to generate sales. To accurately measure this ability, returns and refunds must be subtracted from the total sales figure

**b) Fixed Asset Turnover**: This ratio measures a company's ability to generate net sales from fixed-asset investments such as property, plant, and equipment (PP&E), net of depreciation. It is calculated by dividing net sales by fixed assets

**c) Inventory Turnover**: This efficiency ratio compares the cost of goods sold with the average inventory for a period to assess how effectively inventory is managed.

**d) Debtors Turnover**: This activity ratio measures how efficiently a firm uses its assets by dividing the net value of credit sales during a given period by the average accounts receivable during the same period.

**e) Creditors Turnover**: This ratio, also known as creditors' velocity or accounts payable turnover ratio, measures the number of times accounts payable are paid during a period. It is calculated by dividing net credit purchases by average accounts payable.

**f) Working Capital Turnover:** This ratio is calculated by dividing net annual sales by the average amount of working capital (current assets minus current liabilities) during the same 12-month period.

**Paired t-test:**

The paired sample t-test is used to assess whether the mean difference between two sets of data is zero or not. This test calculates the means of two samples, such as data pre and post an event, and determines if there is any difference between the means. In the case of this study, a t-test is conducted to understand the effect of mergers on a company's performance before and after the merger.

Two hypotheses are considered for testing: the null hypothesis and the alternative hypothesis. The null hypothesis assumes that the mean difference between pre- and post-merger data is zero, while the alternative hypothesis assumes that the mean difference between the two is not equal to zero. The test is considered at a 5% significance level.

**Analysis and findings:**

This study examines the efficiency ratio of an Indian acquirer company in selected M&A deals during two periods: 2007-2008 and 2012-13. To compare the pre- and post-merger performance of the acquirer, the average efficiency ratios of three years are calculated for each company, excluding the year of the merger. For the period of 2007-08, eleven cross-border M&A deals are analyzed, and Table 1 displays the average ratios. According to Table 1, only three out of eleven companies show an improvement in the Total Asset Turnover ratio post-merger, and the Inventory Turnover ratio improved only for Colgate-Palmolive. The Debtors Turnover ratio showed an improvement post-merger for three out of eleven companies, and the Fixed Asset Turnover ratio improved in only two out of seven cases. Colgate-Palmolive is the only acquirer to show an improvement in all selected ratios. To test whether there is a significant difference in performance post-merger, the paired t-test is used. Table 2 displays the results of the paired t-test for the selected ratios in the period 2007-2008. The null hypothesis for the paired t-test states that the mean difference in average selected ratios pre-merger and post-merger is 0. The p-value in Table 2 for all selected ratios is greater than the significance level, indicating that the null hypothesis cannot be rejected.

**Selected ratios (average) of acquirer company-2007-08**

Table 1

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | T.A. T/O  PRE | T.A  T/O  Post | F.A.  T/O/ Pre | F.A.  T/O  Post | INVENTORY  T/O Pre | INVENTORY  T/O Post | DRS  T/O  Pre | DRS  T/O  Post | CRS  T/O  Pre | CRS  T/O  Post | W.CAP  T/O  Pre | W.CAP  T/O  Post |
| **Dr.Rcddy's** | 0.08 | 0.08 | *0.07* | *0.07* | 0.06 | 0.06 | 005 | 0.06 | 0.01 | 0.00 | 0.05 | 0.05 |
| **Colgate Palntolive** | 0.06 | 0.09 | **0.26** | 0.61 | 0.24 | 0.57 | 0.11 | 0.20 | 0.01 | 0.00 | 0.11 | 0.20 |
| **Tata iotors** | 0.04 | 0.02 | 0.14 | 0.05 | 0.09 | 0.03 | 005 | 0.02 | 0.03 | 0.00 | 0.05 | 0.02 |
| **Sw1on** | **0.1 l** | --0.04 | **0.10** | --0.09 | 0.17 | --0.06 | 009 | -0.03 | 0.08 | --0.02 | 0.09 | --0.03 |
| **ONGC** | **0.14** | 0.15 | **0.13** | **0.10** | 0.09 | 0.08 | 006 | 0.06 | 0.01 | 0.00 | 0.06 | 0.06 |
| **Hindalco** | 0.06 | O.o2 | *OJYl* | 0.08 | **0.04** | O.o3 | 003 | **0.04** | 0.08 | 0.01 | **0.02** | 0.03 |
| **Tata Stecl** | 0.09 | 0.02 | 0.21 | 0.10 | **0.12** | 0.03 | 008 | 0.02 | 0.03 | 0.01 | 0.08 | 0.02 |
| **HDFC-Centurion BOP** | 0.07 | 0.03 | **0.11** | 0.05 | **0.11** | 0.04 | 008 | 0.03 | 0.03 | 0.01 | 0.08 | 0.02 |
| **Rdiance lndus.tries-lPCL** | 0.05 | 0.06 | 0.11 | 0.07 | 0.06 | **0.05** | **0.04** | 0.05 | 0.01 | **0.01** | 0.06 | 0.03 |
| **Indian oil Corp-IBP** | 0.08 | 0.04 | 0.13 | **0.05** | 0.07 | 0.06 | 006 | 0.03 | 0.02 | **0.01** | 0.04 | 0.03 |
| JSW-SISCOL | 0.09 | 0.03 | 0.08 | 0.09 | 0.09 | 0.03 | 009 | 0.05 | 0.02 | 0.13 | 0.04 | 0.03 |

**Table 2**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | T.A. T/O  PRE | T.A  T/O  Post | F.A.  T/O/ Pre | F.A.  T/O  Post | INVENTORY  T/O Pre | INVENTORY  T/O Post | DRS  T/O  Pre | DRS  T/O  Post | CRS  T/O  Pre | CRS  T/O  Post | W.CAP  T/O  Pre | W.CAP  T/O  Post |
| Asian Paints | 0.06 | 0.06 | **0.21** | 0.16 | 0.19 | **0.15** | **0.1I** | 0.09 | 0.02 | 0.01 | 0.82 | 0.78 |
| TCS | 0.13 | **0.14** | 0.20 | *0.20* | *0.20* | 0.19 | **0.14** | 0.15 | 0.02 | O.o2 | 0.55 | 0.57 |
| RIL | 0.04 | 0.04 | 0.06 | 006 | 0.04 | 0.04 | O.o3 | 0.03 | **0.01** | 0.01 | 0.40 | 0.4-0 |
| TATA | 0.07 | 0.05 | **0.05** | 0.03 | 0.03 | O.o2 | O.o2 | 0.01 | **0.01** | 0.01 | 0.17 | **0.13** |
| POWER MERCK | 0.06 | 0.03 | o.o5 | 005 | 0.08 | 0.04 | 0.06 | 0.04 | 0.00 | 0.02 | 0.54 | **0.61** |
| STERLING RESORTS | -0.13 | -0.26 | 0.16 | 0.4-0 | **-0.02** | -0.06 | --0.01 | -0.05 | -0.04 | 0.00 | 0.05 | **0.10** |
| **\VIPRO** | 0.08 | 0.06 | o.o6 | 0.06 | 0.08 | 0.06 | 0.06 | 0.05 | 0.00 | 0.00 | 0.36 | 0.36 |
| CIPLA A.MTE K | 0.08 | 0.06 | o.o6 | 0.06 | 0.08 | 0.06 | 0.06 | **0.05** | 0.00 | 0.00 | 0.36 | 0.36 |
| **AUTO** | 0.05 | -0.07 | 0.02 | -0.02 | -0.01 | -0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.11 | **0.10** |
| JINDAL | 0.07 | 0.03 | **0.11** | 0.05 | 0.08 | 0.04 | 0.06 | 0.03 | 0.00 | 0.00 | 0.40 | 0.52 |
| POLY FILMS | 0.20 | -0.03 | 0.10 | -0.06 | 0.10 | -0.05 | 0.09 | -0.03 | 0.00 | 0.00 | 0.09 | -0.03 |
| **Sun** | 0.02 | 0.02 | 0.06 | 0.04 | 0.05 | 0.03 | O.o3 | 0.02 | 0.0 1 | 0.01 | 0.03 | *o.o2* |

Headquartered in Mumbai, Maharashtra, Asian Paints Limited is a multinational paint company engaged in manufacturing, selling, and distributing paints, coatings, products related to home decor, bath fittings, and related services.

Tata Consultancy Services Limited, a consulting company operating in 46 countries, is an Indian multinational information technology service headquartered in Mumbai, Maharashtra and is part of the Tata Group. It is one of the largest Indian companies by market capitalization.

Reliance Industries Limited is an Indian conglomerate holding company with headquarters in Mumbai, Maharashtra, India, that owns businesses across India engaged in energy, petrochemicals, textiles, natural resources, retail, and telecommunications.

Tata Power Limited, part of the Tata Group and based in Mumbai, Maharashtra, India, is an electric utility company engaged in generating, transmitting, and distributing electricity.

In 1967, Merck was incorporated in India as E. Merck India Private Limited, a pharmaceutical company that has since expanded into a science and technology business spanning all sectors of Healthcare, Life Science, and Performance Materials. In 2017, it celebrated its 50th anniversary in India.

Sterling Holiday Resorts Limited, a holiday lifestyle company incorporated in 1986, became a 100% independently managed subsidiary of Thomas in 2015.

Wipro Limited is an Indian multinational corporation headquartered in Bengaluru, India, that provides information technology, consulting, and business process services. In 2013, Wipro demerged its non-IT businesses into separate companies.

Cipla Limited is an Indian multinational pharmaceutical and biotechnology company headquartered in Mumbai, India, that primarily develops medicines to treat respiratory, cardiovascular disease, arthritis, diabetes, weight control, and depression, among other medical conditions.

The Amtek Group, headquartered in India, is one of the largest integrated component manufacturers in India with a strong global presence. It has also become one of the world's largest global forging and integrated machining companies.

Jindal Poly Films Limited, part of the $ 2 billion B.C. Jindal group, offers a wide range of products and solutions for more than 6 decades. The group is involved in diverse businesses including Polyester & Polypropylene films, Steel pipes, Thermal Power Generation, and Photographic products.

Sun Pharmaceutical Industries Limited, an Indian multinational pharmaceutical company headquartered in Mumbai, Maharashtra, manufactures and sells pharmaceutical formulations and active pharmaceutical ingredients primarily in India and the United States.

The Godrej Group, an Indian conglomerate headquartered in Mumbai, Maharashtra, India, is managed and largely owned by the Godrej family.

According to Table 3, it seems that debtors turnover efficiency has improved post-merger for three out of twelve companies, while return on assets has only improved post-merger in the case of TCS. However, in terms of productivity, the asset turnover ratio shows that the ratio has either remained the same or declined post-merger for eight out of the twelve deals.

**Findings:**

The reasons for the findings can be attributed to various factors, including Indian companies not giving enough attention to integration issues at the beginning of a deal. In contrast, international companies demand a detailed synergy assessment and integration plan before finalizing the deal. Additionally, after the deal, the acquired asset may not receive as much attention and may be allowed to depreciate in value. Other factors that could contribute to post-integration hurdles include cultural disparities. Indian companies need to improve their skills in monitoring the success of a deal, while the target company may be seeking cost savings and synergies for the new arrangement. The study found that Indian companies are more successful at merging with Indian target companies.

Indian companies seek cross-border acquisitions to gain access to natural resources, technology, or skills, create scale and new international markets for their products or services, and diversify into new products or markets. It is essential to have a post-merger plan in place, except when raw material price arbitrage is the primary focus. It appears that only a few Indian acquiring companies have a well-defined plan in place.

**Conclusion:**

The findings of the study indicate that M&A deals during the period did not add the expected value to the acquirer companies. This could be due to various factors such as the macroeconomic environment at the time of the deal and the reasons behind the merger from the acquirer's perspective. It appears that some factors, such as the global financial crisis, have had a significant impact on the performance of Indian acquirer companies. The study only covered the pre-1 year and post-1 year periods, and a more extended study could be conducted to assess the impact over a more extended period.

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