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AAKASH N.  
JOSHI

KAMLESH D.  
VALA

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# PRE- AND POST-ACQUISITION IMPACT ON FINANCIAL PERFORMANCE: A STUDY ON HPCL

IMPACTO PREVIO Y POSTERIOR A LA ADQUISICIÓN EN EL DESEMPEÑO FINANCIERO: UN ESTUDIO SOBRE HPCL

AAKASH N. JOSHI<sup>1</sup>  
KAMLESH D. VALA<sup>2</sup>

## ABSTRACT

This study examines the acquisitions in India to comprehend the synergies resulting from the acquisition and its effects on financial performance. The upcoming trends are also examined and suggestions for future action by HPCL are also offered. The impact of the acquisition is discussed in the article after reviewing recent patterns in HPCL. HPCL's financial performance before and after the acquisition is covered by the study, With the help of financial variables of earnings per share, gross profit ratio, net profit ratio, current ratio, quick ratio, capital employed turnover ratio, total assets to debt ratio, and a fixed asset to turnover ratio, the article compares HPCL's financial performance's weighted means of before and after the acquisition with the help of Paired T-test and ANOVA: single factor. The results imply whether the acquisition has impacted the financial performance of the HPCL.

## KEYWORDS

Acquisition, Assets, Capital, Debt, Earnings, Financial Ratios.

## RESUMEN

Este estudio examina las adquisiciones en la India para comprender las sinergias resultantes de la adquisición y sus efectos en el desempeño financiero. También se examinan las tendencias futuras y se ofrecen sugerencias para acciones futuras de HPCL. El impacto de la adquisición se analiza en el artículo después de revisar los patrones recientes en HPCL. El estudio cubre el desempeño financiero de HPCL antes y después de la adquisición. Con la ayuda de variables financieras de ganancias por acción, índice de beneficio bruto, índice de beneficio neto, índice corriente, índice de liquidez inmediata, índice de rotación de capital empleado, índice de activos totales a deuda y índice de activos fijos a rotación, el artículo compara las medias ponderadas del desempeño financiero de HPCL antes y después de la adquisición con la ayuda de la prueba T pareada y ANOVA: factor único. Los resultados implican si la adquisición ha impactado el desempeño financiero de HPCL.

## PALABRAS CLAVE

Adquisición, Activos, Capital, Deuda, Ganancias, Índices financieros.

<sup>1</sup> Master of Commerce, Faculty Member, Department of Accounting and Financial Management, Faculty of Commerce, The Maharaja Sayajirao University of Baroda, [joshiaakash18@gmail.com](mailto:joshiaakash18@gmail.com), ORCID Record: 0000-0003-1661-443X

<sup>2</sup> PhD in Accounting and Financial Management, Assistant Professor, Department of Accounting and Financial Management, Faculty of Commerce, The Maharaja Sayajirao University of Baroda, [kamleshvalamsu@gmail.com](mailto:kamleshvalamsu@gmail.com), ORCID Record: 0000-0003-3097-7106.

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## 1. INTRODUCTION

A company purchasing another company is known as an acquisition which often occurs through a merger or purchase. Expanding a company's product ranges, client base, and market share can all be outcomes of this process, which can be an important step for the business. Acquisitions are frequently motivated by the need to accomplish strategic objectives, such as opening up new markets, improving operational effectiveness, or diversifying revenue sources. Acquisition procedures might be amicable takeovers, hostile takeovers, or mergers of equals, among others (Cartwright & Cooper, 1990). Extensive due investigation, negotiations, and regulatory permissions are all part of the purchase process, which may be difficult and time-consuming. Acquisitions may occasionally go afoul of stakeholders or authorities, making the process more difficult. Despite the difficulties, acquisitions can be a useful growth strategy for businesses wanting to increase their operations and market share. Successful purchases can result in a variety of advantages, including raised revenue, reduced costs, and improved competitiveness.

### 1.1 Merger & Acquisition

The myth is that merger and acquisition are synonymous but both have distinct features and are used accordingly. The point of difference lies: A merger occurs when two or more businesses come together to form a new entity, whereas an acquisition is when one business buys out the other and becomes the new owner. When two businesses merge, they form a new organization whose ownership is normally split between the two founding businesses. In contrast, when a firm is acquired, the acquiring business takes over the acquired business. In a merger, the two companies often have comparable sizes and comparable bargaining power, whereas in an acquisition, the larger and more powerful corporation usually prevails. In an acquisition, the purchased firm becomes a subsidiary of the acquiring company, whereas in a merger, the original companies are dissolved and a new corporation is created (Hoberg & Phillips, 2010). While acquisitions are frequently driven by the need to acquire access to new markets, technologies, or goods, mergers are frequently driven by the goal of establishing a larger, more diverse organization that can compete more successfully in the market.

### 1.2 Characteristics of Acquisition

A company acquiring another company is the act of doing so. Among the crucial traits are the following ones:

**Ownership:** The acquiring corporation usually gains ownership and control of the acquired company by acquiring a controlling stake in the target company.

**Payment:** To buy the target company, the acquiring corporation normally must pay a premium, which may be made in cash, stock, or a combination of both.

**Due diligence:** The purchasing company often conducts a comprehensive due diligence examination prior to completing an acquisition in order to assess the target company's operational and financial soundness, potential risks, and business opportunities.

**Integration:** The purchasing business must integrate the target company's operations, systems, and staff into its operations after the acquisition. This can be a difficult and drawn-out process.

Regulatory permissions may be needed from government agencies including antitrust regulators or securities regulators, depending on the size and nature of the transaction.

Synergies: The desire to realize synergies- cost savings, revenue growth, or operational efficiencies is frequently the driving force for acquisitions.

Strategic aims like acquiring access to new markets, technologies, or goods, or boosting market share and competitiveness are frequently the driving forces behind acquisitions.

Acquisitions carry certain risks, including the possibility of overpaying for the target business, cultural conflicts between the two organizations, and unforeseen operational or financial difficulties (Bonaime et al., 2018).

### 1.3 Review of Literature

Joshi and Desai (2012) carried out a study on Mergers & Acquisitions in the Aviation Industry in India to study the impact of operating performance on shareholders earnings. According to the study's findings, operating performance has not improved and earnings have not been significantly impacted. Evripidou (2012) studied the corporate mergers and acquisitions that caused significant industry restructuring and accelerated industry growth by creating economies of scale. They also stated that M&A has increased market competition and made shareholders more vulnerable because the value of shares fluctuates after a merger or acquisition. The study signifies that the concept of merger and acquisition differs, but both can be used as growth engines and concluded as one of the most important strategic concepts in the business world for ensuring company growth. Bena and Li (2014) conducted a comparative study on Pre and Post corporate integration through Mergers and Acquisitions, the study findings show that how merger and acquisition decisions affect effectively businesses by implement it in domestic and international plans. When they looked at the nature and effects of integration activities on the participating firms, they found that the patterns were either vague or unclear. In order to learn more about the firms' potential and skills, they also examined their performance both before and after mergers and acquisitions. It was also investigated how financial analysis differed before and after the merger and acquisition.

Al-Hroot (2015) conducted a study on the Pre- and Post-Merger impact on the financial performance of Jordan Ahli Bank, based on the research's findings, it has concluded that Jordan Ahli Bank's financial performance did not considerably improve after the merger. Efficiency ratios greatly improved after the merger, although the cash flow ratio did not improve significantly. Gupta (2015) conducted a study on Mergers and Acquisitions in the Indian Banking Sector, the merger of ICICI Bank and The Bank of Rajasthan and the merger of HDFC Bank and Centurion Bank of Punjab were the two merger and acquisition cases chosen at random as samples for the study. The findings showed that mergers and acquisitions had a favorable effect on the financial performance of the sample. A. Khan et al. (2017) investigated the change in operating performance, efficiency, and value addition of Banking Mergers and Acquisition with the help of EVA improvements and performance metrics yields, the findings show the EVA has significantly improved after the acquisition and the merged banks positive impact in their performance and efficiency. The influence of M&A on financial performance was explained in detail by Ansari, M. A., & Mustafa, M. (2018). The study modified the fundamental framework of assessment, and the results indicate that M&A has a considerable impact on the financial performance of a subset of organizations. Poddar (2019) assessed the impact of the acquirer firms pre- and post-financial performance accomplished by comparing the acquirer company's pre-merger and post-merger performance in selected M&A deals in India over two time periods: 2007-2008 (due to the 2008 global financial crisis) and 2012-2013 (many deals increased after 2010 and

then again in 2012-2013) using select financial ratios and a paired t-test at 5% significance. Gupta, I., Raman, T. V., & Tripathy, N. (2021) studied the use of M&A as a tool for creating value for the growth of the business, the study has given concrete information about the M&A and the results also showcase significant impact in the company's value creation comparing with the pre-M&A period. Suryaningrum et al. (2023) conducted a study on Companies facing difficult financial situations that may seek to survive through mergers and acquisitions, using two metrics to assess short- and long-term performance impact with the help of 153 cases of mergers and Acquisitions. MTBR shows favourable results in long-term impact, whereas BHAR shows unfavourable results in short-term impact for the companies.

#### **1.4 Research Gap**

Upon reviewing the body of existing literature on mergers and acquisitions, it was discovered that no specific research had been done on the Oil and Natural Gas Corporation Limited's (ONGC) acquisition of Hindustan Petroleum Corporation Limited (HPCL), particularly with regard to the company's financial performance both before and after the acquisition. our paucity serves as the foundation for our inquiry.

- **Objectives of the study**

- To evaluate the effects of acquisition on the HPCL on their financial performance considering indicators like profitability, growth, and shareholder value.
- To assess the future opportunities for HPCL after the acquisition.

#### **Research Methodology**

- **Research hypothesis**

- H0: There is no significant difference in the financial performance of the company pre- and post-acquisition.
- H1: There is a significant difference in the financial performance of the company pre- and post-acquisition.

- **Data Source for the study**

- The study follows the secondary data collected from various sources like websites, annual reports, magazines, journals, newspapers, and other relevant sources.

- **Period of the study**

- For the analysis, data for six years was taken into consideration which includes three financial years' data from the pre-acquisition period and three financial years' post-acquisition period of HPCL, making the year of acquisition as a base.

- **Variables of the study**

- The study covers the comparison of pre-and post-acquisition financial statements with the help of financial ratios; the ratios that are mostly affected due to merger & acquisition are only taken for the study.
- A total of eight variables were identified, which were EPS, GPR, NPR, CR, QR, CE Turnover Ratio, Total Assets to Debt Ratio, Fixed Asset to Turnover Ratio used for the comparison.

- **Data analysis techniques**

- For data analysis, the weighted means of the ratios, paired sample t-test, and ANOVA single factor test in SPSS and MS Excel are used.

- **Limitations of the study**

- The data for research is secondary that's why all the limitations of secondary data apply to the study as well as the source of the data is not verified by the researcher.

- The study is based on the short-term financial performance of HPCL with selected pre-determined variables of the previous studies and using the common statistical tools for the analysis.

## 1.5 Data Analysis and Interpretation

**Table 1.** Calculations of the financial ratios of HPCL

<i>Ratios</i>	<i>2015-16</i>	<i>2016-17</i>	<i>2017-18</i>	<i>2019-20</i>	<i>2020-21</i>	<i>2021-22</i>
<i>EPS</i>	114.07	40.74	41.72	17.31	70.57	44.94
<i>CE turnover ratio</i>	5.33	6.11	4.17	1.73	7.34	9.75
<i>GPR</i>	0.69	0.78	0.79	0.84	0.75	0.72
<i>NPR</i>	0.10	0.10	0.40	0.29	0.26	0.21
<i>CR</i>	0.63	0.72	0.78	0.65	0.70	0.80
<i>QR</i>	0.28	0.31	0.39	0.31	0.24	0.42
<i>Total Assets to Debt Ratio</i>	4.23	6.35	5.61	4.10	3.98	3.57
<i>Fixed Asset to Turnover Ratio</i>	3.61x	4.69x	4.87x	3.73x	3.07x	2.97x

(Source: Researcher's calculations using information from company annual reports)

Interpretation: The above table (Table 1) shows the information on the various ratios of the company from the year 2015-16 to 2021-22 (three years pre-acquisition period as well as three years post-acquisition period of the company). With the help of the above table, it can be seen that some ratios are good over the years and certain ratios are at the moderate level. For instance, the GP ratio of the company has increased over the years while the fixed asset turnover ratio has decreased comparatively.

**Table 2.** Weighted means of the ratios

<i>Ratios</i>	<i>Pre-acquisition</i>	<i>Post-acquisition</i>
<i>EPS</i>	53.45	48.88
<i>CE turnover ratio</i>	5.01	7.61
<i>GPR</i>	0.77	0.75
<i>NPR</i>	0.25	0.24
<i>CR</i>	0.735	0.742
<i>QR</i>	0.345	0.342
<i>Total Assets to Debt Ratio</i>	5.63	3.8
<i>Fixed Asset to Turnover Ratio</i>	4.6	3.13

(Source: Researcher's calculations using information from company annual reports)

Interpretation: The above table (Table 2) shows the information of the weighted means of the ratios of the company for the pre- and post-acquisition period. The table information is used to calculate the Paired sample T-test and ANOVA one-tailed test to check the hypothesis of the study.

**Table 3.** Paired sample T-test

	M	SD	Paired Differences		t	df	Sig. (2-tailed)
			Std. Error Mean	95% Confidence Interval of the Difference Lower Upper			
Pair Pre- and post-acquisition	.662	2.058	.727	-1.058 2.382	.910	7	.393

(Source: Researcher's calculations using SPSS) Interpretation: The above table (i.e. table 3) shows the result of the paired sample T-test, the calculated t-test value is 0.910 at the 0.05 significance level and

the df is 7 whereas the paired value is 0.393 which shows the paired value is more than significance level. So, as per the paired value, we fail to accept the alternative hypothesis ( $H_1$ ) and accept the null hypothesis indicating no significant difference in the pre-post-acquisition period financial performance of HPCL.

**Table 4.** ANOVA: Single factor test table

**Table 4.1. Summary**

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
<i>Pre-Acquisition</i>	8	70.79	8.84875	329.967
<i>Post-Acquisition</i>	8	65.494	8.18675	276.644

(Source: Researcher's calculations using MS Excel)

Interpretation: The above table (i.e. table 4.1) shows the summary of the ANOVA test where the count is 8 for pre and post, the sum of the observation is 70.79 for the pre-period while 65.494 for post-period, the average of the data is 8.84875 for pre-acquisition period whereas 8.18675 is for the post-acquisition period and the lastly it shows the variance of the observation 329.967 is value of variance of pre-acquisition and 276.644 is for post-acquisition.

**Table 4.2.** ANOVA test result

<i>Source of Variation</i>	<i>SS</i>	<i>Df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
<i>Between Groups</i>	1.752976	1	1.752976	0.005	0.9404	4.60011
<i>Within Groups</i>	4246.28	14	303.3056			
<i>Total</i>	4248.032	15				

(Source: Researcher's calculations using MS Excel)

Interpretation: The above table (i.e. table 4.2) shows the calculation of the ANOVA one-tailed test where the details of the test have been provided, the sum of squares is given which shows that between the groups the SS is 1.752976 and within the groups, the SS is 4246.28 with the total of 4248.032, the degree of freedom is 1 for between groups whereas, At the 5% level of significance, the test's P-value is 0.9404, which is higher than the significance level (i.e., 0.05). With this P-value, the alternative hypothesis is rejected and the null hypothesis—that there is no significant difference in the company's financial performance before and after the acquisition—is accepted. The mean square for within groups is 303.3056, while the mean square for between groups is 1.752976.

## CONCLUSION

Generally, the acquisition of a company can be a potent weapon for competitiveness and expansion, but success depends on careful planning, execution, and continuous management. By following best practices and being aware of the risks and challenges involved, businesses may increase the chances of a successful purchase and create long-term value for all stakeholders. The purchasing firm may gain from acquisitions in a variety of ways, including greater market share, access to new products or technologies, and cost savings from economies of scale. Acquisitions do, however, come with several dangers and difficulties, such as the chance of cultural conflicts, trouble integrating systems and procedures, and the potential for overpaying for the target business (Campa & Hernando, 2006).



From the hypothesis test, it is clear that there is no impact of the acquisition on HPCL's financial performance.

Further, the study is based on the short-term financial performance of HPCL with selected pre-determined variables of the previous studies and the use of common statistical tools for the analysis. The study can be further extended to the same with variables and statistical tools for the long-term financial performance of HPCL.

For Hindustan Petroleum Corporation Limited it is good to link with one of the largest public sector companies in Asia with great opportunities for both the side of the business.

Given its turnover, Hindustan Petroleum Corporation Limited is using a disproportionately large amount of capital and therefore, the possibility of a potential risk that needs to be controlled. HPCL has been maintaining a high Gross Profit ratio but due to its high operating, and administrative sales and labour costs, the Net Profit ratio remains low. This Current Ratio of HPCL is at an alarmingly high degree and should be improved further to enable the company for greater financial efficiency.

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