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Do Partial Acquisition Announcements Affect the Stock Market? Evidence from Indian Chemical and Pharmaceutical Industry

R. Kalia[a], S. Srivastav[b], R. Mittal[c], I. Gupta[d]
[a, d] Amity University, Noida, Uttar Pradesh, India;
[b] Amity University, Greater Noida, Uttar Pradesh, India;
[c] School of Open Learning/Campus of Open Learning, University of Delhi, India

ABSTRACT

The **purpose of the study** is to find out whether partial acquisitions enhance the shareholders' wealth of the acquiring firms in the Indian chemical and pharmaceutical industry. Partial acquisitions are the unique form of corporate restructuring and have become the choice of most companies, which makes this study **relevant** to explore in the current context. The **objective of the study** is to evaluate the impact of partial acquisition announcements on the stock price return of the acquiring companies listed on the Indian Stock Exchange and test the statistical significance of the returns for different event windows. The **novelty of the study** is that it examines the announcement effects of partial acquisitions on the shareholders' wealth of acquiring firms in the Indian chemical and pharmaceutical industry. Event Study Methodology is used with different event windows along with parametric and non-parametric tests to verify the statistical significance of returns. The **research results** shows that the announcements of partial acquisitions generate positive reaction in the shorter event windows of (–1, 0), (0, +1) and (–1, +1) but this reaction is only temporary and quickly diluted over the longer event window of (–10, +10). Hence, the study **concluded** that the shareholders can have a significant return in a shorter event window around the announcements of partial acquisitions. The results of the study are useful for various stakeholders including shareholders, investors, and managers of the companies of the selected industries in their decision-making during partial acquisitions.

Keywords: partial acquisitions; event study methodology; cumulative average abnormal return (CAAR); parametric test; non-parametric tests; chemical and pharmaceutical industries; India

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INTRODUCTION

Recent rapid developments in the global business environment induce managers and shareholders to think and make quick decisions in order to adapt to the technological and strategic changes occurring across the world. Mergers and Acquisitions (M&A) are an important approach for restructuring organisations to gain a competitive advantage by improving overall performance. Due to economic globalisation, M&As have emerged as an appropriate choice for companies for effective distribution of resources and business expansion. Companies began to merge or seek out other types of restructuring to avoid the multiple kinds of risks that are prevalent these days [1]. Considering the current business context and the need for companies to look for different expansion opportunities, this paper explores the benefits of partial acquisitions for the acquirer.

Partial acquisitions, block acquisitions, and minority acquisitions are the terms that are used interchangeably and will refer to the acquisition of equity stakes where acquirers purchase less than 50 per cent of target's shares [2]. It is a different form of corporate restructuring since it changes the ownership of two firms (in opposing ways) and, therefore, modifies the kind of management control over the target. The rise in ownership by the partly acquirer reduces the share of the partial target that is owned by other shareholders. However, the target firms continue to operate as a going concern, making the deal special. Since there has been a change in control and the partial target continues to operate, partial acquisitions present an exceptional opportunity to assess long-term effects on both entities, which is impossible in the case of a complete acquisition because the acquirer absorbs the target involved [3]. Previous studies [4, 5] explored partial acquisitions by looking at their reasons for entering

such kind of deals by the companies and highlighted the significance of partnerships and synergy between the acquiring and target companies. These studies also identified various factors like mitigating incomplete contracts and promoting cooperation between two independent firms, aligning the acquirer's and the target's managerial incentives, protecting, or enhancing the target's managerial incentives, acquirer learn more about the target before acquiring a majority stake, financing the target directly, etc, which are the main causes of companies' opting for partial acquisitions. Some of these factors are also applicable to complete acquisitions, but cost related to the weakened managerial incentives is an important factor to consider in the complete acquisitions due to which the companies are willing to give up control advantages by entering partial acquisitions in order to keep targets' incentives intact [4]. Furthermore, supporting the target firms for their financial constraints is another important factor in determining partial acquisitions. According to the research [6], companies that are struggling financially are more likely to be targets of minority stock purchases. Minority share sales can free up cash flow for the target, releasing it from its financial obligations and allowing it to use that money to finance investments or innovations. In addition, some companies enter partial acquisitions followed by M&A when it is challenging to assess M&A synergies [7]. Despite the multiple studies focusing on acquisitions, partial acquisitions have been investigated far less thoroughly than complete acquisitions, and the results or empirical findings regarding the wealth impacts felt by acquiring companies are not much known. Following the research scarcity, the study on partial acquisitions' effects on the wealth of the acquiring companies in Japan was conducted and concluded that the shareholders' wealth of target companies is substantially greater than that of the acquiring companies in the case of partial acquisitions [8].

Over the past two decades, the business sector in India has radically restructured its operations by using both organic and inorganic modes [9] and a lot of pharmaceutical and chemical sector companies of India (e.g. UPL Ltd., Zuari Agro Chemicals Ltd., Zydus Lifesciences, Brook Laboratories Ltd., etc.) have engaged in step and partial acquisitions for various reasons like expansion of their product portfolio / market presence and gain access to advanced technologies. Broadly chemical and pharmaceutical industry covers those companies which are in the production of pharmaceutical raw materials as well as those companies which are involved in processing of organic and inorganic raw materials into chemical products or ingredients. The chemical, pharmaceutical and drug industries are crucial sectors of the economy of the country which are as important as other sectors like coal and steel.[1] According to Indian Brand Equity Foundation (IBEF), 2019, among all M&A transactions in India during the past three years, more than 70% involved Indian pharmaceutical companies. Due to high drug development costs, low success rate and nature of the industry which includes acquiring companies that have significant potential to generate revenues makes this industry different from other industries [10]. Further, mergers and acquisitions have played a significant role in transforming the Indian chemicals industry. Many deals have been completed over the years in a variety of chemical sub-sectors and due to the sector's rising globalisation, upcoming market opportunities, and the emergence of high-quality companies, a higher level of M&A interest is expected in the coming years from the firms across the spectrum.[2] Moreover, as per the[3]Accenture Report, 2022, on a global level, the chemical sector is experiencing hundreds of mergers and acquisitions every year. As a result of all this activity, the ownership pattern of almost 20% of industry's revenue has changed over the past ten years and M&A has now become a key vehicle for bringing transformation in companies. The traditional M&A drivers like consolidation and portfolio extension were proved to be still significant, but M&A has changed in nature over the past decade and has become a source of development and innovation for chemical firms as they strive to optimise their portfolios, adopt new business models, and reorganise themselves to prosper in the upcoming years.

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Most of the firms in today's scenario have realised the benefits and potential of toehold, partial, and minority acquisitions, hence entering such kinds of sale-purchase agreements. Considering the available literature and to the best of the knowledge of authors, there are many studies on Mergers and Acquisitions but very few covering partial acquisitions. However, over the years, few researchers have been working at different aspects of partial acquisitions, like their nature, causes, synergies, performance, impact on wealth of target firms after the partial acquisitions. Also, few of them have been conducting comparative studies between partial acquisition and complete mergers and acquisitions from the target's perspective in developed nations like the US, Canada, and Japan.

The present study is an attempt to fill one of the research gaps related to "studies on partially acquired firms in developing countries" highlighted by the study conducted a systematic review on financial performance of mergers and acquisitions in India [11].

RQ 1 — to find out whether partial acquisition enhances the shareholders' wealth of the acquiring firms during the event window.

Objective

1. To evaluate the impact of partial acquisition announcement on stock price return behaviour of acquiring company in the short-run.
2. To test the statistical significance of returns by using parametric and non-parametric tests for different event windows.

To address the above-mentioned research question, the following contributions to the body of literature are made in this paper:

- The study focuses on partial acquisitions in the Indian chemical and pharmaceutical industries and examines the announcement effects of such transactions on the stock prices return of the firms.
- Previous studies on the partial acquisitions are in developed nations and have been primarily focused on target firms. However, this study conducted an empirical analysis to find out the shareholders' wealth of acquiring firms around partial acquisition announcements in the Indian context.

The remainder of the paper is structured as follows: the next section presents literature review covering the relevant literature related to partial acquisitions, mergers and acquisitions along with Event study methodology. This is followed by research methodology describing the detailed data collection process and technique used for the analysis. Then, empirical results section highlights the key findings supported by statistical analysis and graphical representation. The conclusion section summarises the important insights of the study followed by discussing the limitations and recommendations for the future research.

LITERATURE REVIEW

The success of M&A activities has been the subject of a lot of research. However, the main goal of this paper is to assess the impact of partial acquisitions from the perspective of the acquiring firms. As a result, studies examining partial acquisitions, their announcements impact, and returns or abnormal gains in the stock market are the primary objective of the review of existing research.

Partial Acquisitions

Partial acquisitions have received relatively limited attention in research. According to the existing literature, majority of the partial acquisition studies predominantly focuses on the shareholders' wealth enhancement of the target firms as compared to acquiring firms thereby leading to the conflicting evidence whether the partial acquisitions enhance the shareholders' wealth of the acquiring firms. The previous studies [12–17] focusing on partial acquisitions worked on empirical testing of the shareholders wealth enhancement of the target firms. Monitoring, synergistic effects (incomplete contracts), M&As, and financial constraints are the various hypothesis proposed for explaining this enhancement. It has been asserted that as a large shareholder, partial acquirers can help in monitoring the target firm's management, thereby improving their corporate governance. Such monitoring may reduce the agency problem and enhance the wealth of all shareholders [13, 16–21]. The studies supporting the synergy hypothesis [16, 22] have suggested that both acquiring and target firms can enhance the shareholders' wealth by leveraging the synergy effect. In this context, partial acquirers are typically non-financial firms that establish an equity alliance with the target firms, thereby generating a synergy effect. According to the previous research [5, 23], partial acquisitions can help in completion of incomplete

contracts facilitating the cooperation among acquiring and target firms and can also help the acquirer to enter an industry with a lesser amount of investment as compared to the amount of investment required in full acquisitions while still benefitting from the synergy effect [19]. Some studies [12, 15, 17, 24] proposed and concluded that partial acquisitions followed by M&A enhance the shareholders' wealth of the target firms. They further observed that under such acquisitions, the acquirers partially acquire at the first stage leading to the majority ownership on the second stage. Thus partial acquisitions in anticipation of the M&A are found to be able to enhance the shareholders' wealth in the target firms. Few researchers through their studies [4, 5, 25] asserted that partial acquisitions alleviate the information asymmetry of target firms, indirectly providing them with greater access to capital. On the other hand, the target firms can directly reduce their problem of financial constraints by the cash obtained from the acquiring firms [2, 6]. Hence, these studies have concluded that partial acquisitions are useful in alleviating the financial constraints of the target firms, which enhances their shareholders' wealth.

The above-mentioned studies primarily focus on the wealth enhancement of shareholders of target companies and explored different motives of partial acquisitions. In contrast, there is a limited body of research in the literature that examines how partial acquisitions affect the wealth of shareholders in the acquiring firms. Partial acquisitions and their impact on the wealth of acquiring companies have been addressed in the study based on Japanese non-financial firms by proposing three hypotheses: synergy, performance enhancement and wealth transfer, whose results reported that there is a difference between the shareholders' wealth of the acquiring and target firms i.e. acquiring firms can enhance their wealth by taking advantage of the wealth of their targets whereas target firms can enhance their wealth by receiving support from acquiring firms indicating that target firms tend to experience substantially higher shareholders' wealth compared to acquiring firms post partial acquisitions [8]. Another study during the time span of 1978 to 1980 explored the shareholders' wealth enhancement for the target and acquiring firms which are listed on New York or American Stock Exchange and concluded that there is an asymmetrical wealth enhancement of the target and the acquiring firms, indicating that the target firms enjoy more benefits than acquiring firms [12]. On the other hand, the results of few studies [23, 26] display that acquiring firms in partial acquisitions do not enhance the shareholders' wealth which is contradict to the results of other similar studies [12].

Hypothesis 1*: There is a significant cumulative average abnormal return (CAAR) during the event window due to the announcement of partial acquisitions.*

Mergers and Acquisitions and Event Study Methodology

There are many studies in the financial literature focusing on the performance of the firms during M&As and their impact on the shareholders' wealth. [27–30]. As per the literature, performance of the firms is commonly evaluated through market by finding out how M&A announcements affect the firms' securities, and such announcements are the events having new information about the firms directly or indirectly involved in the process. This information is reflected in the return and volatility of the firms [31]. Most of the empirical studies in literature have evaluated M&As by measuring their two effects, i.e., value creation for shareholders and market volatility but usually evaluated these effects individually [27, 32–36]. This paper explored the literature focusing on the value creation for shareholders using market model of event study methodology.

Previous research focusing on the Indian manufacturing companies investigated the shareholders' response to the mergers and acquisitions announcement before, during and after such events by considering the event window of 41 days, thereby concluding that if investors buy shares of the acquiring firms the day before and sell them the day after the announcement day, they may generate a sizable return. According to this research, merger or acquisition news initially sparks a favourable response and this response is a short-term and is quickly diluted [37]. The most recent study examining the effect on the share prices of the competing banks and Latin American banks between 2000 and 2019 used two metrics: cumulative abnormal return and event-induced variation (EIV) based GARCH event study methodology revealed that the acquirers and target banks have statistically significant CARs, whereas their competitors and targets are unaffected by M&A announcements [38]. Previous study using an event study methodology with 27 days event window explored the impact of mergers and acquisitions on the

profitability and stock price behaviour of acquiring firms in pharmaceutical sector. The results of the analysis did not show notable impact on the abnormal returns and there has been a decline in cumulative abnormal return (CAR) [39]. Prior Research exploring the post-acquisition performance of the acquiring firms in Fintech M&A measured by abnormal returns concluded that stock market returns of the acquirer companies in developed nations are better as compared to the developing nations because of the ease the developed nations provide in using technology of the targets [40]. A comparative analysis was conducted to find out the impact of cash financed and stock financed M&A deals on shareholders' value in India. The findings revealed that cash financed deals create more value to shareholders as compared to the stock financed deals [41]. The conflicting results have been derived (i.e. negative and positive returns for different firms after the acquisition) from the analysis conducted to find out the impact of mergers and acquisitions on the stock prices behaviour of the banking industry in Pakistan [42]. Another study evaluating the impact of domestic mergers on the shareholders' wealth using BSE listed companies between 2004 and 2014 shows negative abnormal return of 1.82% throughout the announcement period which concludes that Indian acquiring firms' lower shareholder wealth during the post-event short-run window period [43]. The research examining 57 domestic and international pharmaceutical companies that enter M&A transactions from 2001 to 2007 shows a significant positive link between AR, CAR, and shareholders' wealth of Indian pharmaceutical companies on their international M&A but did not create any shareholder wealth in domestic M&As [44]. The study having a sample of 34 firms analysed the effect of merger announcement on the wealth of acquiring, acquired and combined firm shows that shareholders of the acquired firms gained significant gains of 11.6% in a 21-day event window. On the other hand, the shareholders of the acquiring and combined firms do not have such wealth gains [45].

RESEARCH METHODOLOGY

Data Collection and Sample Selection

This study includes the partial acquisitions that took place from January 2005 until February 2023 in the chemical and pharmaceutical industries, extracted from CMIE Prowess IQ database. The daily closing prices of the sample firms and market return have been obtained from the BSE website. The market return has been measured by the S&P BSE Sensex, as all the sample firms are listed on BSE, which is the oldest stock exchange in Asia. The total number of merger and acquisition announcements that took place during this period is 512 and the sample of partial acquisitions has been manually identified.

The data has gone through the following sample inclusion and exclusion criteria:

1. Samples should be collected between January 2005 and February 2023.
2. The acquirer and the target should be Indian firms.
3. The acquirer should be listed on the stock exchange, and daily returns data are available on the BSE for the event and estimation window.
4. Deals are classified as partial acquisitions if more than 5% and less than 50% are acquired, and the sample also included deals of step acquisitions where the total stake had not exceeded 50% at the time of last acquisition during the sample period.
5. Deals are dropped off if multiple firms are acquired by the acquirer on the same day, where the step acquisitions will lead to a 100% acquisition of the target and the companies whose trading data is not available.

After using the above filters, 33 deals of Indian chemical and pharmaceutical companies were selected for the study.

Mechanism of Event Study Methodology

This study uses the Event Study Approach for the analysis, which is suitable to estimate the effect that an event has on firms' securities [46].

Event and Estimation Window

The announcement of the M&As by the company is made on the event day. This day is crucial for determining how the announcements affected the performance of the firms. The analysis considered the day of the partial acquisition announcement as "Day 0" which is the day the event is first made publicly known or made available to the general public. The study period used to calculate the stocks' average abnormal returns (AARs) and cumulative average abnormal returns (CAARs) is known as the event window. For assessing the returns of the stock prices in the event study approach, different studies use different event windows. According to several studies, the shortest event window is three days (one day before and one

day after the event), while the longest window is 750 days [47]. The event window for investigation may be brief to detect a rise or drop in share prices as a result of an occurrence, according to the efficient market theory. The theory is in support of using an event study for mergers and acquisitions over a short time frame. In the long term, various economic variables may have an impact on both the increase and decrease in prices. Following the previous study [9] and the efficient market theory, the researchers in this study used an event window of 21 days, which is 10 days before and 10 days after the announcement of the event (*Fig. 1*), in order to avoid the disadvantage related to impact from other variables. The estimation window is the selected days taken before the event window, which is used to estimate the "Normal Returns." The estimation window in this study is 120 days before the event window, which is consistent with the previous literature [43] and other similar studies [48, 49] which suggested that the normal duration of the estimation window for event studies based on daily returns is between 100 and 300 days, while the event window is between 21 and 121 days. The event window in this study has been further split into smaller windows for in-depth analysis after defining the event and estimation windows and the leakage impact has been captured by analysing the different windows, specifically (–10, 0), (–5, 0), (–1, 0), (0, 0), (0, +1), (–1, +1), (–2, +2), (–5, +5), and (–10, +10).

Calculation of Stock Returns and Market Returns

The computation of returns from the security prices and index values were made using the following formula:

$$R_{it} = \ln\left(\frac{P_{it}}{P_{it-1}}\right), \quad (1)$$

where R_{it} — Return on stock/index i on day t;

P_{it} — Closing price/value of stock/ index i on day t;

P_{it-1} — Closing price/value of stock/ index i on day $t-1$;

ln — Natural Logarithm.

Definition of Abnormal Return

The term abnormal return refers to the difference between the expected return and the actual return on a firm's stock during an event window. The market model has been used in this study for the calculation of abnormal returns and expected returns. In the market model, the abnormal and expected returns can be calculated as follows:

$$AR_{it} = R_{it} - ER_{it}, \quad (2)$$

where AR_{it} is the abnormal return of stock i at time t; R_{it} is the actual return of stock i at time t; ER_{it} is the expected or normal return of stock i at time t.

The following market model regression was run to estimate its coefficient using the data from the estimation window [46]. A normal or estimated return can be calculated by using the below mentioned formula:

$$Expected\ /\ Normal\ \mathrm{Re}turn\left(R_{it}\right) = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \quad (3)$$

$$E\left(\varepsilon_{it} = 0\right),$$

where R_{it} — Normal / Expected Return on stock i at time t of estimation window;

α_i — the intercept coefficient;

β_i — the market return coefficient;

R_{mt} — the coefficient of market return stock i;

ε_{it} — the error term which is the zero mean disturbance term.

Using the market model mentioned above, it is possible to determine the AR for a certain stock on a specific day. This study evaluates the effect of an event over different window periods for the sample of 33 firms. Therefore, the average abnormal return (AAR) can be calculated from the aggregate of the AR results:

$$AAR_t = \frac{1}{N}\sum_{j-1}^{N} AR_{jt}, \quad (4)$$

where AAR_t — Average Abnormal Return at time t.

The sum of the daily average abnormal return over an interval of one, two, or more trading days begins with day T_1 and ends with day T_2. Mathematically, the equation of *CAAR* is:

$$CAAR_{t1,t2} = \frac{1}{N}\sum_{j-1}^{N}\sum_{t=T1}^{T2} 1^{AR_{jt}}, \quad (5)$$

where $CAAR_{t1,t2}$ is the cumulative average abnormal return.

Significance Test for Event Study

The study uses both parametric and non-parametric tests to check the reliability of the results. Following are the three parametric and two non-parametric test

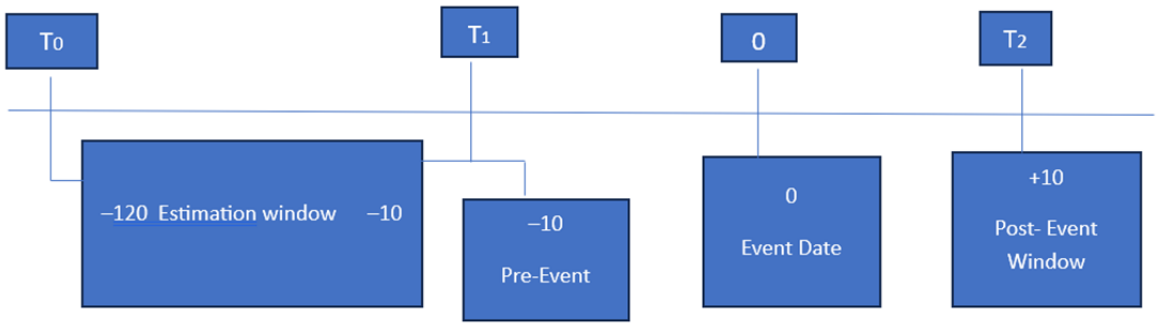

Fig. 1. **Timeline of Event Window**

Source: The authors.

statistics used to test the significance:

1. Crude Dependence Adjustment Test (CDA) [50];
2. Cross-sectional t-Test [51];
3. Patell Z Test [52];
4. Generalised Sign Test [53];
5. Rank Test [54].

EMPIRICAL RESULTS

This section presents the findings, which were obtained in the research using the statistical technique known as event study methodology. For each day of the event window i.e., 10 days before and 10 days following the announcement of partial acquisitions, the average abnormal returns and the cumulative average abnormal returns were analysed.

From *Fig. 2*, it can be interpreted that the acquiring companies had positive average abnormal returns on Day (–1) as 0.51% and Day (1) as 0.27%, but remain negative on day (0) which is the event day. However, the results show a positive trend from day (5) till day (9), and again become negative on day (10).

Furthermore, the returns are also averaged across the event window to get the net magnitude of overall returns. *Fig. 3* shows the graphical analysis of the CAAR for all the days in a 21-day event window. The result shows that CAARs are negative on most of the days in the event window, except on day (8) and day (9) with values 0.18% and 0.34%, where we have positive CAARs.

The results of Cumulative average abnormal returns to shareholders of Indian pharmaceutical and chemical firms on the announcement day of partial acquisition as well as on multi-event window period are reported in *Table* and the graphical analysis for the same has been shown in *Fig. 4*. It can be seen from *Table* that the CAAR values for various event windows before the announcement like (–10, 0), (–5, 0) and (–1, 0) are –1.15%, 0.11% and 0.46% respectively under which the value at event window (–10, 0) is negative but significant whereas the CAAR value at event window (–1, 0) is positive and significant at a 5% significance level according to the Generalized Sign test. Furthermore, various other event windows are being assessed to study the leakage effect of Partial Acquisitions announcements. According to the Crude Dependence test, the CAAR value of 0.21% in window (0, +1) is positive and significant at a 5% significance level. The results indicates that the investors who purchased the shares one day before and sold them one day after the partial acquisition announcements can earn some extra returns.

Lastly, according to the crude dependence test, the CAAR values for event windows (–1, +1) and (–5, +5) are 0.73% and 0.56%, respectively, and are statistically significant at the 5% significance level. However, the CAAR values for event windows (–10, +10) and (–2, +2) are insignificant. Accordingly, hypothesis 1, which states that there is a significant Cumulative average abnormal return during the event window, is rejected. This shows that the CAAR is more significant in shorter periods like (–1, 0), (0, +1) and (–1, +1) than in comparatively longer periods (–10, +10), indicating that investors first responded positively to the announcements and then took a quick corrective action which makes CAAR negative in the longer event windows.

Though the wealth enhancements of acquiring firms in partial acquisitions have been researched much less than those of target firms, the findings on whether these partial acquisitions increase the wealth of acquiring firms' shareholders are mixed. The results of this study did not show significant positive results during the event window which are consistent with the findings of previous studies

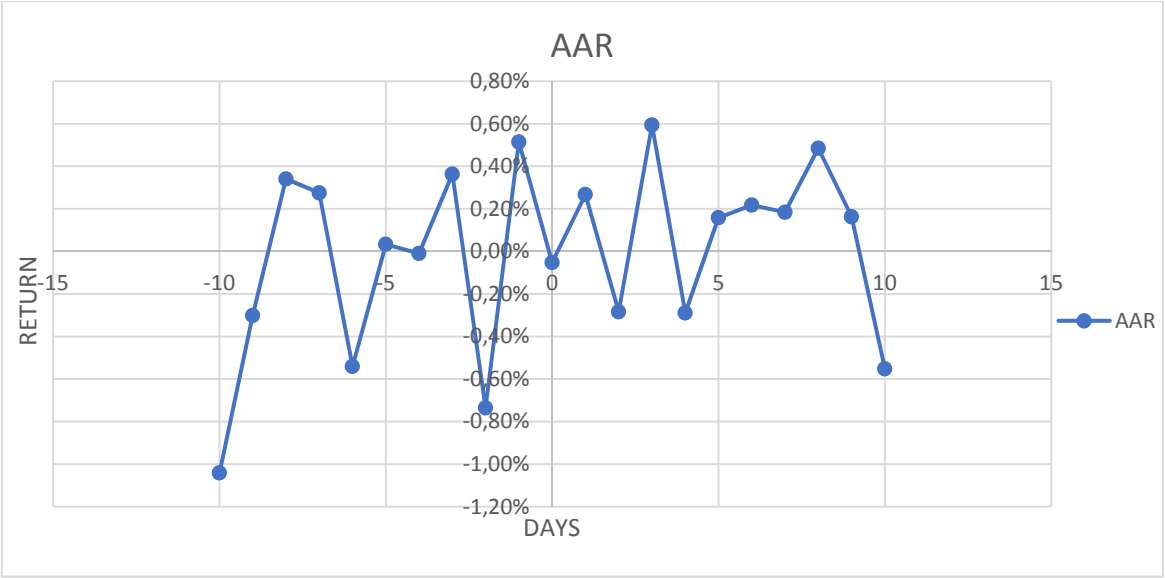

Fig. 2. **Graphical View of the "Average Abnormal Return" (AARs) During the Event Window**

Source: Authors' calculations.

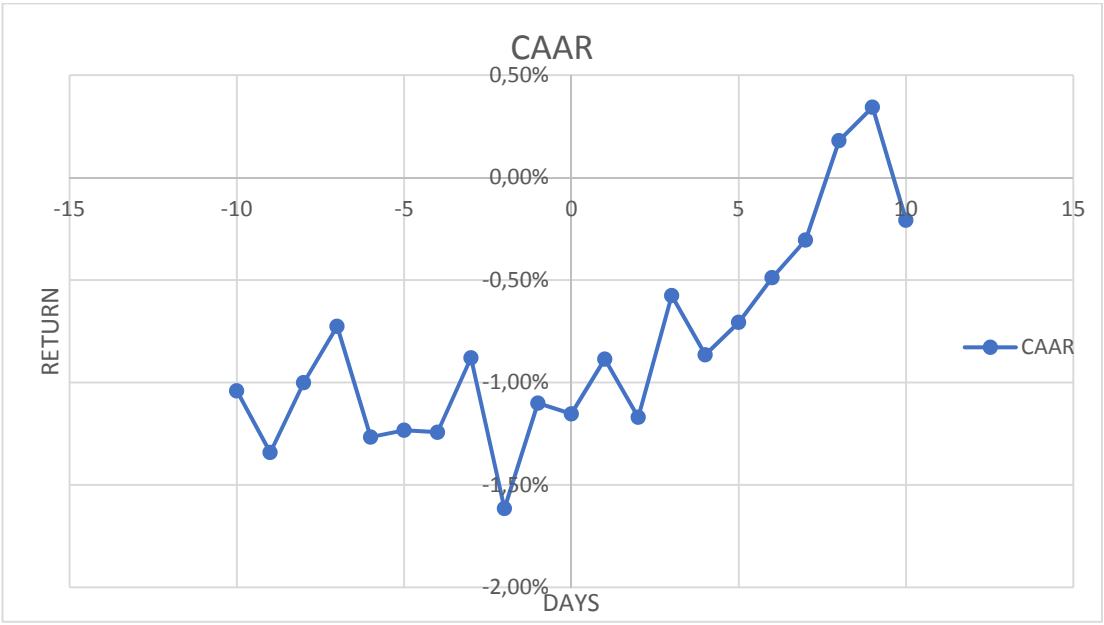

Fig. 3. **Graphical View of the "Cumulative Average Abnormal Return" (CAARs) During the Event Window**

Source: Authors' calculations.

[23, 26] which suggests that the acquiring firms cannot sufficiently enhance or decrease their shareholders' wealth in partial acquisitions.

CONCLUSION

This study includes partial acquisitions from the period January 2005 — February'2023 and addressed the primary research question of the study whether partial acquisition announcements enhance the shareholders wealth of the acquiring firms during the event window. Event study methodology has been used to examine the short-term shareholder gains by using different event windows of (−10, +10), (−5, +5), (−2, +2), (−1, +1), (−10, 0), (−5, 0), (−1, 0), and (0, +1). The abnormal returns and cumulative average abnormal returns (CAAR) were calculated using the market model, and then hypothesis testing was performed over the CAAR of the sample by using parametric and non-parametric tests to identify if the CAAR is statistically significant.

The findings of this study show that the CAAR of partial acquirers across several smaller event windows (−1, 0), (0, +1), and (−1, +1) are significant, indicating that

Table

Results of Parametric and Non- Parametric Tests

Event windows	CAAR	Parametric Test						Non– Parametric Test			
		CSSD	Prob	CDA	Prob	Patell Z	Prob	Sign Test	Prob	Rank Test	Prob
(–10, 0)	–1.15%	–0.97	0.33	–5.06	0.00*	–0.02	0.98	0.13	0.46	0.13	0.82
(–5, 0)	0.11%	0.08	0.94	0.40	0.69	0.00	1.00	0.23	0.52	0.43	0.41
(–1, 0)	0.46%	0.30	0.77	1.54	0.13	0.01	1.00	1.21	0.01*	0.21	0.33
(0, 0)	–0.05%	–0.03	0.97	–0.17	0.86	0.00	1.00	0.47	0.49	0.12	0.56
(0, +1)	0.21%	0.13	0.90	3.13	0.00*	0.01	0.99	4.16	0.65	0.25	0.62
(–1, +1)	0.73%	0.42	0.68	5.31	0.00*	0.02	0.98	0.50	0.49	0.32	0.52
(–2, +2)	–0.29%	–0.15	0.88	–1.41	0.16	–0.01	1.00	0.01	0.51	0.56	0.57
(–5, +5)	0.56%	0.24	0.81	8.15	0.00*	0.02	0.99	0.06	0.41	0.23	0.84
(–10, +10)	–0.21%	–0.07	0.94	–0.91	0.36	0.00	1.00	0.62	0.25	0.31	0.67

Source: Compiled by the authors.

Note: * Statistical significance at 0.05 level.

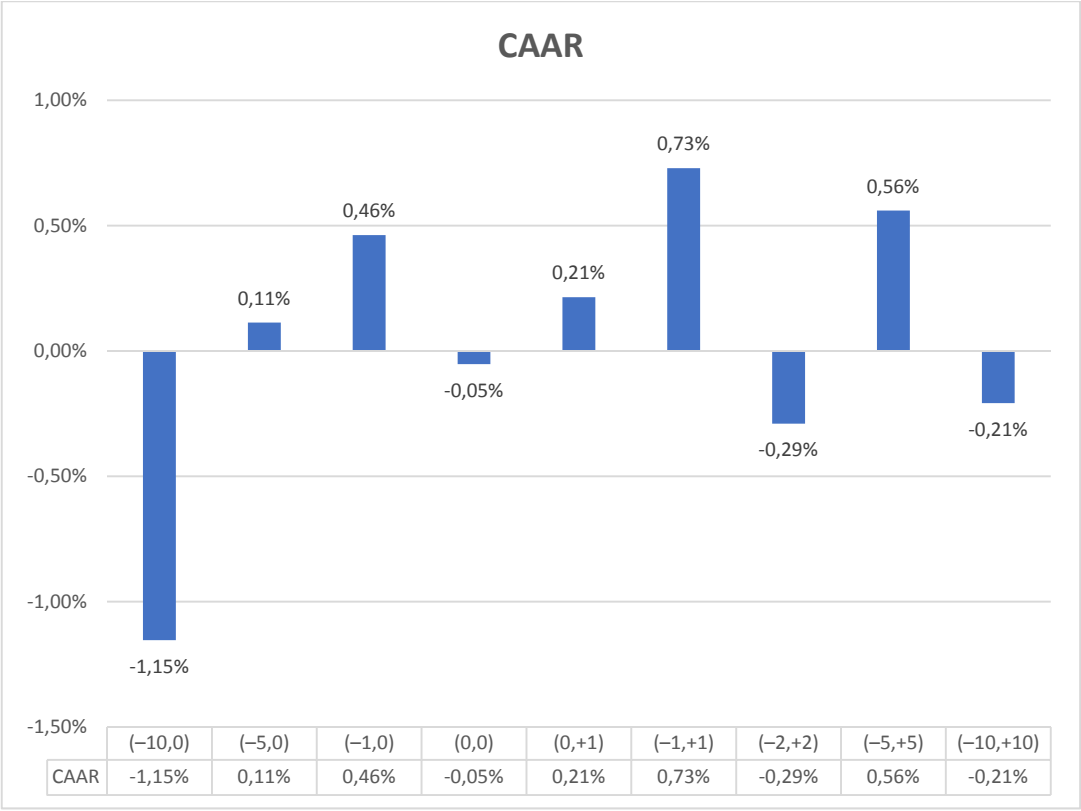

Fig. 4. **Cumulative Average Abnormal Returns (CAARs) for Different Event Windows to Understand the Leakage Effect**

Source: Authors' calculations.

investors start to react as soon as the announcement information is made public, which increases stock prices and raises shareholders' expectations that the partial acquisitions will be advantageous (i.e., it results in access to economies of scale and scope, available resources, learnings from the targets and also helps in exploring the synergies with the targets which will further be helpful in the long term strategic plan of complete acquisitions). However, there will be a market correction in the longer event windows (–10, +10), which will turn the CAARs negative. According to the results, there will not be any significant earnings for Indian acquirers of partial acquisitions during the event window of (–10, +10).

The findings of the study are significant for both shareholders and general investors. Following the analysis of the study, the shareholders can make significant earnings if they remain proactive around the partial acquisition announcements. The information provided in this research can thus be used by investors to make short-term gains. The current study is also important for managers and higher-level management of Indian pharmaceutical and chemical companies that have concerns about the impact of the partial acquisition announcement on the shareholders wealth.

LIMITATIONS AND RECOMMENDATIONS

Partial acquisitions have been researched in developed countries such as the USA, Japan, and Canada. The literature on such studies in India is very scant. The study considers only the Partial Acquiring firms in the Indian chemical and pharmaceutical industries. Thus, the results cannot be generalised to other manufacturing and service sectors. Due to the complexity of data collection, only the acquiring firm's sample of 33 deals has been analysed; thus, the target firm's data has not been considered. Furthermore, further studies can include toehold acquisitions along with partial acquisitions and analyse the shareholders return to target firms in India. The researchers can also work on large samples with longer periods of analysis, thereby using methodologies like the buy-and-hold methodology (BHAR) and Calendar time portfolio approach (CTIME). Moreover, the authors did not find any study analysing the effect of partial acquisitions on the trading volume of the acquirer as well as the targets. Further, researchers can also compare the gains in cross border partial acquisitions by Indian firms.

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ABOUT THE AUTHORS

Ruchi Kalia — Research Scholar at Amity International Business School, Amity University, Noida, Uttar Pradesh, India
https://orcid.org/0009-0009-1162-4613
Corresponding author:
kalia_ruchi@rediffmail.com

Shalini Srivastav — PhD, Assoc. Prof., Amity College of Commerce and Finance, Amity University, Greater Noida, Uttar Pradesh, India
https://orcid.org/0000-0002-4787-507X
shalini_15@yahoo.com

Ruhee Mittal — PhD, Assist. Prof. at Department of Economics, School of Open Learning/Campus of Open Learning, University of Delhi, India
https://orcid.org/0000-0001-9420-1871
ruhee.mittal@yahoo.com

Isha Gupta — PhD, Assist. Prof., Amity University, Noida, Uttar Pradesh, India
https://orcid.org/0000-0003-3103-6279
ishagupta74@gmail.com

Author's declared contribution:
R. Kalia — identification of the problem, critical analysis of literature, data collection and data analysis.
S. Srivastav — reviewed the paper and formation of research conclusions.
R. Mittal — formation of research methodology, tabular and graphical representation of results.
I. Gupta — statistical test analysis and description of results.

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