# INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS AND MANAGEMENT

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**JOURNAL AND OTHER ARTICLES**

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

**CONFERENCE PAPERS**

- Garg Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

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# SHAREHOLDER WEALTH EFFECTS TO MERGER ANNOUNCEMENTS IN INDIAN IT INDUSTRY

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## ABSTRACT
*The study is addressed to financial implications of mergers to the acquirer and target shareholders in the Indian Information Technology Industry occurred from Jan. 2000 through June 2010. Constant Market Model was applied to study a sample of (28) merger announcements both by Independent and Controlling bidder firms. The overall results suggested that merger announcements in IT sector has no significant impact on bidder portfolio. While it creates significant positive abnormal returns for target shareholders. When evaluating the announcement impact separately for independent and controlling bidders as well as for independent and controlled targets, it was found that although independent bidder and target portfolio view the mergers equally, there is a different perception between controlling bidders and controlled target shareholders. The controlling bidders show incredulity to merger deals whereas controlled targets stand optimistic about the consequences of these arrangements.*

## KEYWORDS
CMM, Abnormal Return, Independent Bidders, and Controlling Bidders.

## PRELUDE
The practice of mergers and acquisitions has attained considerable significance in the contemporary corporate scenario which is broadly used for reorganizing the business entities. Indian industries were exposed to plethora of challenges both nationally and internationally, since the introduction of Indian economic reforms in 1991. The cut-throat competition in international market compelled the Indian firms to go for merger and acquisition strategies, making it a vital premeditated option. The factors responsible for making the merger and acquisition deals favorable in India are: dynamic government policies, corporate investments in industry, economic stability, "ready to experiment" attitude of Indian industrialists. Among the different sectors that have subscribed to mergers and acquisitions in recent times in India, Information Technology is worth mentioning. This particular sector has played a major role in placing India on the international map. **"**The revenue of the Information Technology Sector rose from 1.2 percent of the gross domestic product (GDP) in the year 1997 to an estimated 5.8 per cent in 2008**"**. Moreover, the industry accounts for a 5.19% of the country's GDP and export earnings as of 2009. According to a study by Springboard Research, the Indian IT services market is estimated to remain the fastest growing in the Asia-Pacific region with a Compound Annual Growth Rate (CAGR) of 18.6 percent. However, with the growth of many countries in the field of software outsourcing, competition in the global market is increasing. For e.g. China has now emerged as the second most preferred destination for overseas IT services, though it is still far behind from India in the field of software and services. However it is believed that Indian firms have to face stiff competition from other emerging outsourcing sectors, in the near future. M&A as a strategic plan have emerged as key growth drivers in the Indian software services landscape. Giant companies like Tata Consultancy Services, Wipro and Infosys though targeting companies at the international level, yet there is an increase in domestic deals by other small and mid capitalization firms. These companies look at M&A mostly due to the size factor or for expanding their market reach or as an entry strategy in the foreign country or business segment. Apart from this, pricing pressures and global companies consolidating and building offshore capabilities have made M&A relevant for these companies. In recent times, many IT firms operating in India restructured themselves through M&A to reach new markets and to meet global competitions. Although, this sector witnessed some important research studies concerning M&A impacts but these were not only restricted to accounting findings but also the research studies were generally carried out for high capitalized firms engaged in international deals and no attention was paid to M&A deals by small and mid-capitalized firms that assume an important role in the building sensation or breakdown of an industry. Therefore to fill this gap, the present study is an attempt to seek evidence of shareholder wealth effects to announcement of domestic merger deals by Indian IT firms irrespective of their capitalization dimensions.

## REVIEW OF THEORITICAL AND EMPIRICAL STUDIES
Empirical research on background, conduct, and outcome of M&A transactions emerged in the late 1970's and early 1980s. An influential research using event study methodology includes the work of Dodd and Ruback (1977), Dodd (1980), and Asquith (1983), who analyze abnormal stock returns of targets and bidders on takeover announcement and deal closing or Cancellation. Bradley et al. (1983) while focused on abnormal returns of targets and bidders of unsuccessful tender offers, Davidson et al. (1989) and Croci (2006) investigated for stock returns of firms involved in cancelled M&A. All researchers by and large conclude that a takeover bid results in positive abnormal returns for targets and slightly negative abnormal returns for bidders.

## RELEVANCE OF THE STUDY
This study determines whether there is an 'abnormal' stock price effect associated with an unanticipated event so that the various stakeholders like investors, fund managers, analysts, planners, and policy makers, market regulators, accounting standard setters, researchers, the government, and the public can infer the significance of the event. It can reveal important information how a security is likely to react to a given event, and can help predict how other securities are likely to react to different events. Thus the implications are enormous for foreign as well as local investors who make their decision based on current market values and expected risk-return tradeoffs that are associated with their investments.

## SAMPLE

The sample to be included for the study; the stock prices of both acquiring and acquired firms had to be publicly traded for at least 30 days before and 30 days after the merger announcement dates. Since Beta Model would be used for measuring abnormal returns, there is no question of regressing the stock returns to market returns over the clean estimation period. Therefore the stock of bidder and target firms publicly traded at least one month before the merger announcement would be enough to gauge the abnormal returns. In addition, merger deals must involve internal merger deals and there must not appear other corporate actions during the time of merger declarations. The sample selection by considering such criteria leaves out final sample of 35 out of 43 merger announcements. Nevertheless due to unavailability of data and exact event date information, the sample was further reduced to 28 announcements comprising 28 bidder firms but only 15 target companies. Further it is worth to mention here that, bidding and target firms have been classified separately into independent and controlling bidders and independent and controlled targets so as to have a detailed investigation of event impact. We define independent bidders, as those bidders which announced the merger of those target firms that are not controlled by them either directly or indirectly. While as, controlling firms refer to bidders which announced the merger of those firms that are already their subsidiary companies either directly or indirectly.

## DATA AND METHODOLOGY

The daily closing prices of sample IT firms that were involved in the merger deals during the period 2000-2010, had been collected from Centre for Monitoring Indian Economy (CMIE) Prowess and BSE website. Announcement dates had been verified by comparing them with data available on Money Control (A Financial Information Source). So called, standard event study methodology has been employed to measure the effect of an event in relation to stock prices of the firms. The event study methodology calls for examining the returns on a firms stock around the event date and separating out the portion of the total returns that is reaction to the event. Since our purpose is to check for relationship between public arrival of information and excess returns and to observe short term and immediate effects of information, daily stock price data has been considered. Sometimes information affects the stock on same day. But if the market is not informationally efficient then it may affect after one day, two days, and three days. The daily actual rate of return is calculated as:

*Rit = [(Pit-Pit-1+Dit (if any)/Pit-1]* *(Eq-1)*

Where;

Rit= The rate of return on security i on day t

Pit= The Closing price on security i on day t

Pit-1= The closing price on security i on day t-1 and

Dit= The cash dividend (if any) on security i on the ex-dividend date

Similarly, the daily closing rates of market indices are calculated by

*Rmt = [(Pmt-Pmt-1) / Pmt-1]* *(Eq-2)*

Where;

Rmt = The rate of return on the market index on day t

Pmt = The closing market index (BSE-500[1]) on day t

In order to carry out an event study, one need to define an 'event window' .The placement of the event window is of critical importance to measure the market reaction correctly. A window that is too narrow could miss the impact of the event, while a window that is too wide will introduce noise and likely to misguide the analysis towards finding no statistically significant abnormal return. This study examines three symmetric event windows: a three day (-1, +1), five-day (-2, +2) and eleven days (-5, +5) event window. These window lengths are appropriate to capture any news that might have leaked shortly before the official announcement was made and also considers any short-term stock price reactions linked to the event after the announcement. An examination of 500 published event studies in academic press revealed that short-term event studies deliver quite reliable results while long-term event studies underlie some serious limitations. According to Brown and Warner (1985), in case of short term analysis, the Constant-Mean Return Model and the Market Model give similar results. Concentrating on short term impact, the method of calculation of abnormal return does not impact its robustness. The only difference between these two methodologies is the coefficients of alpha and beta which are assumed 0 and 1 under Constant Market Model but are computed under Sharpe Market Model.

The abnormal returns under Constant Market Model is given by

$AR_{it} = R_{it} - (E(R_{mt})$ *(Eq-3)*

Where; $AR_{it}$ = Abnormal returns on security i on day t

The abnormal returns of individual security are averaged for each day surrounding the event day i.e., 5 days before and 5 days after the event day. The average abnormal return (AAR) is the average deviation of actual returns of a security from the expected returns. The following model is used for computing the Average Abnormal Return.

$$AARit = \sum_{I=1}^{N} ARit \;/ N \qquad (Eq\text{-}4)$$

Where;

$AAR_{it}$ = Average abnormal returns on day t and N= No. of firms in the bidder/target blocks.

Since the security's overall reaction to the merger announcements or the event will not be captured instantaneously in the behavior of average abnormal return for one specific day, it is necessary to accumulate the abnormal returns over a long period. It gives an idea about average stock price behavior over time. Generally, if market is efficient, the CAAR should be close to zero. The model used to ascertain CAAR is:

$$CAARt = \sum_{i=1}^{N} AARit \qquad (Eq\text{-}5)$$

Where t= -5, +5

## PARAMETRIC SIGNIFICANCE TEST

The cumulative average abnormal return provides information about the average price behavior of securities during the event window. If markets are efficient, the AARs and CAARs should be close to zero. Parametric test' is used to assess significance of AARs and CAARs. The 1%, 5% and 10% level of significance with appropriate degree of freedom has been used to test the null hypothesis of no significant abnormal returns after the event day. The conclusions has been based on the results of t values on AARs and CAARs for the during pre and post merger announcement days. The 't' test statistics for AAR for each day during the event window is calculated as:

$T_{stat} = AAR/\sigma(AAR)$ *(Eq-6)*

Where;

---

[1] The BSE-500 Index represents nearly 93% of the total market capitalization on BSE and covers all 20 major industries of the economy. Moreover, it represents 70% of the total turnover on the BSE.

AAR = Average abnormal return
σ (AAR) = Standard error of average abnormal return
The t statistics for CAAR for each day during the event window is calculated by using following formula:
*T = CAAR/σ (CAAR)* *(Eq-7)*
Where,
σ (CAAR) = Standard error of cumulative average abnormal return.

## HYPOTHESIS TESTING

Based on the past empirical studies concerning event study analysis of merger and acquisition announcements, the following hypothesis has been developed to test the same in the Indian context.
**$H_{01}$**: There would be no significant impact of merger announcements on the shareholders wealth of (Bidder) IT firms
**$H_{02}$**: The standardized abnormal returns to the acquired institutions (Targets) in the respective industry would be positives.

## RESULTS AND DISCUSSIONS

Table 5.10 summarizes the daily average abnormal return (AAR) and cumulative average abnormal return (CAAR) for independent and controlling bidder shareholders of the Indian IT industry. Out of 11 days event window, the positive average abnormal return for independent bidder firms is observed for eight days amounting to 74% while being significant at the announcement day indicates shareholders belief that the merger can go through. The abnormal returns immediately vanished after the announcement indicates the market is efficient in absorbing quickly the information into market prices. On the merger announcement day, the abnormal return is traced about 1.8%. Similarly the daily cumulative abnormal return (CAAR) appeared positive throughout the 11 days with statistical significance at announcement day and immediately for the following day. However, statistical significant returns were observed also on day +3 and +5.

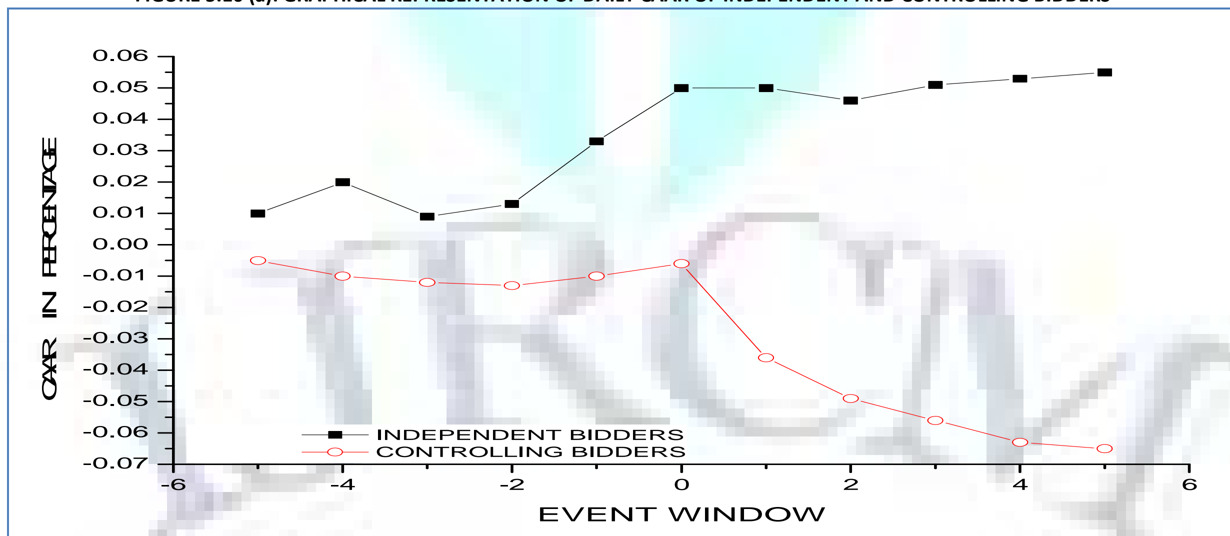
**TABLE 5.10: AAR AND CAAR OF INDEPENDENT AND CONTROLLING BIDDER FIRMS**

| EW | Independent Bidders *(No. of observ.19)* | | | | Controlling Bidders *(No. of observ.9* **)** | | | |
|---|---|---|---|---|---|---|---|---|
| | AAR | t-stat | CAAR | t-stat | AAR | t-stat | CAAR | t-stat |
| -5 | 0.010 | 0.701 | 0.010 | 0.701 | -0.005 | -0.788 | -0.005 | -0.788 |
| -4 | 0.010 | 1.259 | 0.020 | 1.127 | -0.005 | -1.164 | -0.010 | -1.175 |
| -3 | -0.011 | -0.766 | 0.009 | 0.569 | -0.002 | -0.130 | -0.012 | -0.539 |
| -2 | 0.004 | 0.400 | 0.013 | 0.709 | -0.001 | -0.193 | -0.013 | -0.567 |
| -1 | 0.019 | 1.377 | 0.033 | 1.262 | 0.003 | 0.287 | -0.010 | -0.568 |
| 0 | 0.018 | 1.912** | 0.050 | 1.639* | 0.003 | 0.324 | -0.006 | -0.291 |
| 1 | -0.001 | -0.062 | 0.050 | 1.635* | -0.030 | -2.275** | -0.036 | -1.762** |
| 2 | -0.004 | -0.433 | 0.046 | 1.343 | -0.012 | -0.704 | -0.049 | -2.158** |
| 3 | 0.005 | 0.485 | 0.051 | 1.394* | -0.007 | -1.531* | -0.056 | -2.161** |
| 4 | 0.002 | 0.185 | 0.053 | 1.281 | -0.007 | -1.205 | -0.063 | -2.121** |
| 5 | 0.002 | 0.280 | 0.055 | 1.393* | -0.002 | -0.328 | -0.065 | -2.053** |

** Significant at 10% Level, ** Significant at 5% Level, *** significant at 1% level*

Figure 5.10 (a) which demonstrates a graphical representation of daily cumulative average abnormal return (CAAR) of independent and controlling bidders, reveals how independent bidder portfolio experienced a continuous increase in positive earnings throughout the event window except on day -2 and -3 where it has been dropped slightly.

**FIGURE 5.10 (a): GRAPHICAL REPRESENTATION OF DAILY CAAR OF INDEPENDENT AND CONTROLLING BIDDERS**




Similarly, the positive average abnormal return (AAR) for controlling bidder shareholders appeared positive for only two days amounting to 18% while being insignificant. On the other hand, the statistically significant among negative abnormal returns were observed on the following day of an event and also for the third day implies merger deals spur the company shareholders to sell their shares collectively. On the event day, AAR is traced about 3%. Contrary to this, the daily CAAR appeared negative through the event window while also being significant for all post announcement days.

Figure 5.10 (a), which also describes a graphical depiction concerning daily CAAR of controlling bidders, reveals how cumulative returns are growing slightly in the pre-announcement days but turn down as soon as the event occurred indicates the disbelief of shareholders that the merger could provide the synergical antidotes. This acuity has a direct contrast with buying practice of stock by independent bidder shareholders on similar dates.

Moreover Table 5.10(b), which highlights average CAR of independent and controlling bidder firms, reveals significant positive returns appeared also in three days run-up window for independent bidders. While as, the significant negative CAR is observed in eleven days of time interval for controlling bidder shareholders indicates by and large that merger ruin the affluence of shareholders belonging to firms which blend their own subsidiaries. However, It is

important to mention here that no abnormal returns appeared in the pre-announcement days under both cases of bidders (Independent & Controlling), indicates by and large information was neither leaked and nor anticipated by market participants.

**TABLE 5.10 (b): AVERAGE CAR OF INDEPENDENT AND CONTROLLING BIDDER FIRMS**

| Event Window | Independent Bidders | | Controlling Bidders | |
|---|---|---|---|---|
| | CAR | t-stat | CAR | t-stat |
| (-1,+1) | 0.036 | 2.097** | -0.023 | -1.185 |
| (-2,+2) | 0.037 | 1.331 | -0.037 | -1.163 |
| (-5,+5) | 0.055 | 1.393 | -0.065 | -2.053** |

** Significant at 10% Level, ** Significant at 5% Level, *** Significant at 1% level*

From the above results it seems obvious that the acquirer firm should have a very robust communications plan at hand. Not every contingency will be anticipated, but many can be. Most important is to have teams in place to be able to respond quickly to any false rumours and to replace immediately any such gossip with fact. The company needs to stay in control as best it can during the entire deal process. The most effective way to do this is to have a continuous stream of positive stories about the feat of the company. The belief that the value of the firm could decrease due to dilution of capital has to be removed from the minds of public, shareholders and other stakeholders by way of educating them through workshops, seminars, that can go a long way towards allaying anxiety, uneasiness and even panic **.**

**TABLE 5.11: AAR AND CAAR OF INDEPENDENT AND CONTROLLED TARGET FIRMS**

| | **Independent Targets** *(No of observ. 11)* | | | | **Controlled Targets** *(No of observ. 4)* | | | |
|---|---|---|---|---|---|---|---|---|
| EW | AAR | t-stat | CAAR | t-stat | AAR | t-stat | CAAR | t-stat |
| -5 | 0.030 | 0.879 | 0.030 | 0.879 | 0.010 | 1.128 | 0.010 | 1.128 |
| -4 | -0.015 | -0.889 | 0.015 | 0.496 | 0.012 | 1.303 | 0.021 | 1.412 |
| -3 | 0.016 | 1.222 | 0.031 | 0.778 | -0.004 | -0.207 | 0.018 | 0.562 |
| -2 | 0.006 | 0.559 | 0.037 | 0.994 | 0.033 | 1.231 | 0.051 | 1.530 |
| -1 | -0.002 | -0.230 | 0.035 | 0.791 | 0.025 | 0.903 | 0.075 | 1.472 |
| 0 | 0.063 | 3.852** | 0.098 | 1.811* | 0.047 | 2.509** | 0.122 | 2.422** |
| 1 | -0.023 | -1.672* | 0.075 | 1.207 | 0.015 | 0.843 | 0.137 | 2.305** |
| 2 | -0.005 | -0.386 | 0.070 | 1.096 | 0.010 | 0.428 | 0.147 | 1.826* |
| 3 | -0.007 | -0.421 | 0.063 | 0.826 | 0.012 | 0.481 | 0.159 | 1.544 |
| 4 | -0.005 | -0.358 | 0.057 | 0.673 | 0.011 | 1.072 | 0.169 | 1.523 |
| 5 | -0.019 | -1.359 | 0.038 | 0.434 | 0.003 | 0.220 | 0.173 | 1.372 |

**Significant at 10% Level, ** Significant at 5% Level, *** significant at 1% level*

Table 5.11 highlights the daily average abnormal return (AAR) and cumulative abnormal return (CAAR) for independent and controlled target firms. Out of the eleven days event window, the positive average abnormal return (AAR) is observed for only four days amounting to 36% while being significant at announcement day. However, on the very next day, significant negative returns appeared indicates by and large the market overreaction phenomenon by shareholders. On the event day, the average abnormal return (AAR) is traced about more than 6% followed by the negative abnormal returns on the very next day. On the other hand, the cumulative abnormal returns appeared positive for entire eleven days while also significant on the event day.

Figure 5.11 (a), which demonstrates a graphical representation of daily cumulative average abnormal return (CAAR) of independent and controlled target firms, reveals wide fluctuations in growing scenario of cumulative returns for independent target shareholders particularly after the announcement period where it has witnessed a continuous decline. The abnormal returns to this particular group of IT industry is in direct contrast with the findings of Wall and Gup (1989), Madura and Wiant (1994), and Hudgins and Seifert (1996)) which indicated that a majority of merger-related wealth generation is received by shareholders of target firms. The reason might could be explained by the nature of the bid deal.

**FIGURE 5.11 (a): GRAPHICAL REPRESENTATION OF DAILY CAAR OF INDEPENDENT AND CONTROLLED TARGETS**

Similarly, the positive average abnormal return (AAR) for controlled target firms comprises ten days positive amounting to 91% while being significant at the merger announcement day. On the event day, average abnormal return is traced about more than 4% and on the other hand, the daily cumulative average abnormal return is observed positive for entire eleven days of event window while significant at the event announcement day and also for the consecutively two days following the event.

Figure 5.11 (a) which also gives a graphical representation of daily (CAAR) regarding controlled targets, reveals an increasing trend in total cumulative returns for entire eleven days except for day -3 which witnessed a slight drop. These results are in line with findings of Hawawini and Swary (1990), Houston and Ryngaert (1994), Madura and Wiant (1994).

Moreover, Table 5.11(b), which demonstrates an average CAR for independent and controlled target firms reveals none of the cumulative abnormal returns appeared statistically significant in given time intervals for independent target shareholders. While as, the controlling target shareholders experienced the positive and statistical significant returns for three and five days of run-up window implies that merger deals have favorable implication for shareholders subscribed to these firms. It is worth to mention here that both controlling bidder firms and controlled targets stand winners during the merger deals. On the other hand, it also creates a wealth for independent bidder shareholders but have a breakeven point implication for independent target shareholders.

**TABLE 5.11 (b): AVERAGE CAR FOR INDEPENDENT AND CONTROLLED TARGET FIRMS**

| | Independent Targets | | Controlled Targets | |
|---|---|---|---|---|
| Event Window | CAR | t-stat | CAR | t-stat |
| (-1,+1) | 0.038 | 0.456 | 0.086 | 2.718** |
| (-2,+2) | 0.039 | 0.729 | 0.129 | 2.508** |
| (-5,+5) | 0.038 | 0.434 | 0.173 | 1.372 |

** Significant at 10% Level, ** Significant at 5% Level, *** significant at 1% level*

## OVERALL RESULTS

Table: 5.12 recapitulate the overall average abnormal returns (AARs) and cumulative average abnormal return (CAARs) for both bidder as well as target firms in IT sector. The positive abnormal returns (AARs) for bidder shareholders is observed for seven days amounting to 63% while being significant at the merger announcement day implies positive perception of shareholders to merger proceedings.

Contrary to this, the CAAR appeared positive throughout the event window although statistically insignificant.

Similarly, the positive average abnormal return (AAR) for overall target shareholders is observed for seven days amounting to 63% while being statistically significant on event day, where it materialize about 5.8%. On the other hand, the CAAR is traced positive for entire eleven days while being significant on event day and for consecutively three days following the merger event. The positive statistical significant returns however emerged also for day -2.

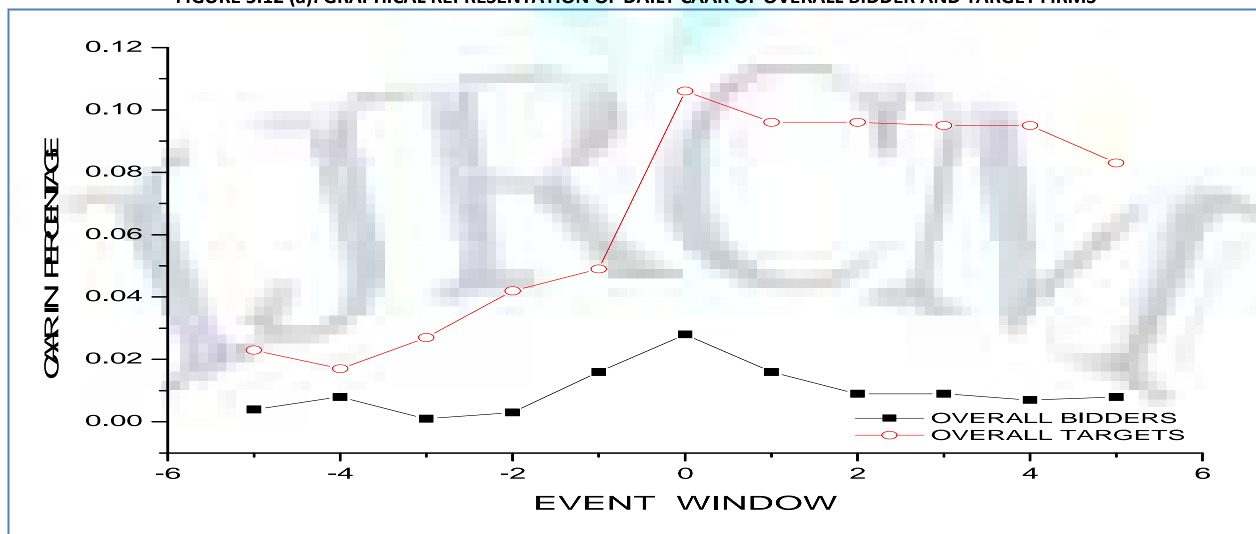
**TABLE 5.12: OVERALL AAR AND CAAR OF BIDDER AND TARGET FIRMS**

| EW | Bidders *(No of Observ.28)* | | | | Targets *(No of Observ.15)* | | | |
|---|---|---|---|---|---|---|---|---|
| | AAR | t-stat | CAAR | t-stat | AAR | t-stat | CAAR | t-stat |
| -5 | 0.004 | 0.440 | 0.004 | 0.440 | 0.023 | 1.036 | 0.023 | 1.036 |
| -4 | 0.004 | 0.813 | 0.008 | 0.715 | -0.006 | -0.514 | 0.017 | 0.854 |
| -3 | -0.007 | -0.698 | 0.001 | 0.057 | 0.010 | 0.931 | 0.027 | 0.969 |
| -2 | 0.002 | 0.329 | 0.003 | 0.198 | 0.015 | 1.326 | 0.042 | 1.599* |
| -1 | 0.013 | 1.365 | 0.016 | 0.916 | 0.007 | 0.638 | 0.049 | 1.472 |
| 0 | 0.012 | 1.727* | 0.028 | 1.336 | 0.058 | 1.976* | 0.106 | 2.787** |
| 1 | -0.012 | -1.280 | 0.016 | 0.738 | -0.010 | -0.869 | 0.096 | 2.132** |
| 2 | -0.007 | -0.840 | 0.009 | 0.365 | 0.000 | -0.025 | 0.096 | 1.951** |
| 3 | 0.000 | 0.035 | 0.009 | 0.345 | -0.001 | -0.075 | 0.095 | 1.592* |
| 4 | -0.002 | -0.299 | 0.007 | 0.247 | 0.000 | -0.004 | 0.095 | 1.427 |
| 5 | 0.001 | 0.144 | 0.008 | 0.278 | -0.012 | -1.611 | 0.083 | 1.167 |

**Significant at 10% Level, ** Significant at 5% Level, *** Significant at 1% level*

Figure 5.12(a) reveals and demonstrates how target CAAR is increasing in the pre-announcement days except for day -4 and declining during the post announcement days.

**FIGURE 5.12 (a): GRAPHICAL REPRESENTATION OF DAILY CAAR OF OVERALL BIDDER AND TARGET FIRMS**




Moreover, Table 5.12(b) which highlights average CAR for overall bidder and target firms reveals that none of cumulative abnormal returns appeared significant for bidder portfolio. Nonetheless, positive and significant cumulative abnormal returns are observed in three and five days of run-up window for shareholders subscribed to target firms indicates by and large target shareholders enjoy higher returns as and when merger announcements take place.

**TABLE 5.12 (b): AVERAGE CAR FOR OVERALL BIDDER AND TARGET FIRMS**

| | Bidder | | Targets | |
|---|---|---|---|---|
| **Event Window** | **CAR** | **t-stat** | **CAR** | **t-stat** |
| **(-1,+1)** | 0.013 | 0.923 | 0.054 | 1.661** |
| **(-2,+2)** | 0.008 | 0.370 | 0.069 | 1.711** |
| **(-5,+5)** | 0.008 | 0.278 | 0.083 | 1.167 |

***Significant at 10% Level, ** Significant at 5% Level, *** Significant at 1% level*

## CONCLUDING REMARKS

This study has attempted to quantify the initial short-term capital market response to merger announcements that have occurred within the Indian Information Technology industry during 2000 through June 2010 by using an event study methodology. The results suggest that the target shareholders by and large enjoy higher returns to merger related deals. While as, it has breakeven point inference for bidder shareholders. The Hubris theory which suggests that shareholders of bidding firms will suffer after the announcement of a merger proposal. But the finding of this study, demonstrates a contrary result. In fact, the shareholders of bidding firms obtain a small gain or this position become steady after the announcement of merger outcomes. The bidding firms at least do not suffer any loss from the merger. The implication of this result is that mergers and acquisitions are not a risky investment for the shareholders of bidding firms. On the other hand, Shareholders of target firms enjoy a significant abnormal return during the announcement of a merger proposal. They earn a high cumulative abnormal return during that period which is in line with the Hubris theory. The implication of this situation is that shareholders of target firms should maximize their wealth effect during the announcement of merger proposals. In this period, the shareholders of target firms act as "profit takers" because the value of their firms is very high (Hubris theory), and hence, they can enjoy greater gains as a result of the merger proposal. The future research may be directed to examine the acquisition and takeover deals in the same and other industries for a detailed stock price reaction. One can broaden the scope of the study by examining other corporate actions like stock splits, bonus issue, dividend announcements so as to have adequate evidence of stock price reaction and also market efficiency concerning Indian capital markets.

## REFERENCES


- Asquith P, (1983) "Merger Bids, Uncertainty, and Stockholder Returns," Journal of Financial Economics (April), 51-83.
- Bradley M, A. Desai, and E.H. Kim, (1983) "The Rationale Behind Inter Firm Tender Offers," Journal of Financial Economics (April), 183-206.
- Brown S.J. and J.B Warner (1980) Measuring Security Price Performance" Journal of Financial Economics, 8(3), 205-258.
- Brown, S.J., and J.B. Warner,(1985) "Using Daily Stock Returns: The Case of Event Studies," Journal of Financial Economics 14,March , pp. 3-31.
- Croci E. (2006): Stock Price Performance of Target Firms in Unsuccessful Mergers and Acquisitions, SSRN working paper.
- Davidson, W.N., III, D. Dutia, and L. Cheng,(1989) "A Re-Examination of The Market Reaction To Failed Mergers," Journal Of Finance (September), 1077-1084**.**
- Dodd P., (1980) Merger Proposals Management Discretion and Stockholder Wealth, Journal of Financial Economics 8, No.2, 105-138.
- Dodd, P. And Ruback, R. (1977): "Tender offers and Stockholder Returns: An Empirical Analysis" Journal of Financial Economics, 5(3), pp. 351-373.
- Fama F Eugene, Fisher Lawrence, Jensen C. Michael (1969) "The Adjustment of Stock Prices To New Information" International Economic Review, Vol. 10, No. 1. Pp. 1-21.
- Fishman, M.J., 1989, "Preemptive Bidding and The Role of The Medium Of Exchange In Acquisitions," Journal of Finance (March), 41-57.
- Hansen R.G., (1987) "A Theory for the Choice of Exchange Medium in Mergers and Acquisitions," Journal of Business (April), 75-95.
- Khilliji N (1993), "The Behavior of Stock Returns in The Emerging Market" A Case Study Of Pakistan" The Pakistan Development Review, 32:34,593-604.
- Kothari S.P and J Warner (2004) "Econometrics of Event Studies" A Working Paper.
- Panayides P. M., & Gong, X. (2002), The Stock Market Reaction To Merger And Acquisition Announcements In Liner Shipping. International Journal of Maritime Economics, 4: 55-80.
- Paul Asquith, "Merger Bids and Stock Returns" Journal of Economics, 11, April 1983, 51-83.
- Wansley W James, Lane R. William & Et. Al, (1983) "Abnormal Returns to Acquired Firms by Type of Acquisition and Method of Payment" Financial Management, Vol.12, No.3, pp 16-22.

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