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Innovative Mode of Financing and Abnormal Returns to Shareholders of Indian Acquiring Firms

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Abstract

The present paper is an attempt to explore the influence of method of payment employed in financing the acquisitions. The aim of the present paper is to investigate the returns to acquirer shareholders in the case when a combination of cash and stock are used as mode of payment. The study also looks into whether the short-run performance of domestic and cross-border acquisitions is impacted differently when a combination of cash and stock are used as mode of payment. This paper examines the abnormal return to the shareholders of 14 acquiring companies in India during the period 2003-08. The results indicate acquisitions generate statistically significant positive abnormal returns of 5.29 percent during the 5 days event window (-2, +2) when a combination of cash and stock is used as a mode of acquisition. The major finding of disaggregated analysis is that, the acquirer experience higher cumulative average abnormal return (CAAR) in the case of acquisition of domestic target firm. The acquirer earns more than ten percent cumulative average abnormal return (CAAR) during the 5 days event window (-2, +2) when the target firm is domestic. The acquirer earn more than three per cent when during the 5 days event window (-2, +2) when the target firm is cross-border. However, the difference is not statistically significant. The acquisitions financed with a combination of cash and stock experience positive abnormal returns, could be a signal in support of the investment opportunity hypothesis and the risk sharing hypothesis.

Introduction

Performance of acquiring firms has been extensively studied empirically in finance as well as in strategy literature. Most empirical studies agree that the method of payment plays an important role in explaining acquiring firms' stock return. The stock market accords differing reaction to the announcement of acquisitions on the basis of mode of financing being used. In an acquisition, the acquirer can pay the claims of the target firm shareholders either by paying cash or by issuing stock or by a combination of both cash and stock. The present paper is an attempt to explore the influence of method of payment employed in financing the acquisitions. The aim of the present paper is to investigate the returns to acquirer shareholders in the case when a combination of cash and stock are used as mode of payment. The study also looks into whether the short-run performance of domestic and cross-border acquisitions is impacted differently when a combination of cash and stock are used as mode of payment.

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For better exposition, the paper is organized into six sections including this section. Section II reviews the previous empirical research work related impact of method of payment on acquirer returns. Data collection and sample selection related issues have been delineated in section III. Section IV explains the objective of the present work and methodology used. The major findings are contained in section V. Section VI presents concluding observations, limitations and directions for future research.

Literature Review

Despite plethora of literature on the implications of mergers and acquisitions, the empirical evidence on returns to acquirer' shareholders are not conclusive. In other words, the results of existing studies in finance and business strategy indicate that wealth effects of shareholders of the acquiring firms are mixed. The empirical findings on the subject are varied; while some studies report negative cumulative average abnormal returns, others document returns from zero or positive cumulative average abnormal returns. The determinants of performance of acquiring firms have also been extensively studied empirically in finance as well as in strategy literature. Most empirical studies agree that the method of payment plays an important role in explaining acquiring firms' stock return. The stock market accords differing reaction to the announcement of acquisitions on the basis of mode of financing being used. In an acquisition, the acquirer can pay the claims of the target firm shareholders either by paying cash or by issuing stock or by a combination of both cash and stock. Asquith, Bruner and Mullins (1987), Huang and Walkling (1987), Travlos (1987), Yook (2003) and Heron and Lie (2002) found that acquisitions financed with stock generate negative returns to the acquirer shareholders on acquisition announcement, whereas returns for acquisitions financed with cash generate are zero or slightly positive.

Many hypotheses have been put forward to explain the theoretical rationale why the share prices are influenced by the choice of the payment method:

The "*free cash flow*" hypothesis opines that acquisitions being paid for in cash reduce the agency costs and conveys positive signal to market (Jensen, 1986; Masse *et al*., 1990). *Free cash flow* hypothesis propose that cash transactions result in positive abnormal returns.

*Asymmetric information hypothesis (*also known as *the information content hypothesis)* states that an offer to pay in shares for an acquisition will be seen by market participants as a signal that the stocks are overvalued (Myers and Majluf, 1984). A stock offer enables an acquirer to share the risk of not realizing the expected future growth opportunities with the target firm in the post-acquisition period. Hansen (1987) supports asymmetric information hypothesis with a different point of view. He argues that when an acquirer is not able to assess the true value of the assets of the target firm, it will finance such an acquisition with stock. He proposes that the stock financing has a "contingent pricing effect" and enables the acquirer to share the risk of overvaluation of the target firm with that of the target firm shareholders in the post-acquisition period. Stock offers convey a negative signal to the market that the acquirer is not-confident about the valuation of the target company and wants to share the risk of overvaluation with the target company shareholders in the post-acquisition period.

A few studies have investigated the impact of asymmetric information on the choice of mode of payment (cash or stock) by the acquiring firms (Fishman, 1989; and Eckbo *et al*., 1990). The acquiring firm may experience the risk of overpaying the target firm under high information asymmetry. If the payment is made in cash, the target firms will accept the offer only when the offer value exceeds the firm's intrinsic value (known to the target but not known to the acquirer). The risk of overpayment is much higher in this case. If the payment is made in the acquiring

firm's stock, the value of the offer is determined by the combined value of the acquirer and the target as well as the synergy resulting from the acquisition. Because of the "contingent-pricing effect" (Hansen, 1987) in the stock payment, the cost of overpayment is reduced, as any of such cost will be absorbed by the combined firms and, thus, partly shared by the target firms. Therefore, one would expect that higher information asymmetry will lead to lower cash payment or more stock swaps in the acquisition. *Asymmetric information hypothesis* conclude that stock transactions lead to negative abnormal returns around the announcement date.

Contrary to the above hypotheses examined by (Myers and Majluf, 1984; Jensen, 1986), Martin argues that stock transactions are no longer observed as a negative signal by the market participants. He suggested the *risk sharing hypothesis and the investment opportunity hypothesis*.

The risk sharing hypothesis proposes that it could be beneficial to pay in stock especially in high-risk transactions, because in this case, the target firm will have an incentive to make a success of the takeover transaction (Rappaport and Sirower, 1999; Martin, 1996). Martin examines this hypothesis and observes that the acquirer is more likely to use stock to finance an acquisition when the acquirer's growth opportunities are higher.

The investment opportunity hypothesis proposes that firms with excellent future investment opportunities should not pay in cash for acquisitions. Cash transactions often have to be financed with new debt. Cash flows, however, should not be used for debt service payments since this reduces the amount of discretionary cash flows available in the future (Jung *et al*., 1996; Martin, 1996).

The investment opportunity hypothesis and the risk sharing hypothesis conclude that stock transactions are no longer observed as a negative signal by the market participants.

Extant literature establishes that internationally, that cash offers are accompanied with higher returns to the acquirer firm shareholders than the stock offers. The rationale suggested is that cash is usually employed in financing an acquisition when the acquirer has less information asymmetry about the true value of the target company's assets.

In context of cross-border and domestic acquisitions, Conn *et al.* (2005) suggest that the signalling effect of cash transactions may not have the same force in the case of cross-border mergers and acquisitions. They suggest that other factors may have influence on the means of payment. For example, they argue that the use of equity by cross-border acquirers may be due to problems associated with acquiring information about foreign firms.

Gaughan (2002) suggests that the use of cash may be due to the reluctance of foreign target firms to accept overseas stocks and this might neutralise the signalling impact of cash acquisition. In the light of these arguments, it remains unclear whether acquisitions financed with cash or stock performs similarly in the case of cross-border and domestic mergers and acquisitions.

The apparent controversy in the empirical literature regarding the profitability of cash and stock financed acquisitions in context of cross-border and domestic acquisitions emphasis the need for further research. Moreover, previous literature has not focused on the possibility of innovative financing like combination of cash and stock as mode of payment.

Extant literature also has focused on the implications of domestic versus cross border acquisitions for acquirers. Empirical work documents variation in returns for acquirers in domestic and cross-border acquisitions (Cakici *et al.,* 1996; Aw and Chatterjee 2004; Conn *et al*., 2005; Lowinski *et al*., 2004; Campa and Hernando 2004; Goergen and Renneboog 2004; Moeller and Schlingemann 2005; Francis *et al.,* 2008). In recent works, (Barai and Mohanty, 2010; Gubbi *et*

al., 2010; Karels *et al*., 2011; Zhu and Malhotra, 2008) observe positive returns for cross-border acquisitions by acquirer in emerging market firms. Rani, Yadav and Jain (2011) also document positive market reaction to the announcement of foreign acquisitions in pharmaceutical industry in India.

In light of the above discussion, the present paper investigates the returns to acquirer shareholders in the case when a combination of cash and stock are used as mode of payment. The study also looks into whether the short-run performance of domestic and cross-border acquisitions is impacted differently when a combination of cash and stock are used as mode of payment.

Data Collection and Sample Selection

This study is based on acquisitions which were announced by Indian corporates listed on Bombay stock exchange during the period January 2003 to December 2008. For collecting data, Thomson SDC Platinum Mergers and Acquisitions Database have been used. The announcement dates have been verified from the archives of corporate announcements on Bombay stock exchange.

Sample Selection Procedure

All transactions that fulfil the following conditions have been included in the study:

- Public limited companies listed on Bombay Stock Exchange.
- Mergers and acquisitions announced between January 2003 and December 2008.
- Acquisitions of minor stakes (that is less than 51 per cent) have been excluded from the sample.
- Mergers and acquisitions in the financial sector are excluded from the sample. This is because of the different nature of assets and liabilities of financial firms, and the different financial reporting of these companies.
- There is no announcement of issuance of new shares by way of domestic or international offering in the form of Public Offer, follow- up of public offer Preferential Issue, Foreign Currency Convertible Bonds (FCCB), American Depository Receipts (ADR) and Global Depository Receipts (GDR), announcement of another merger or acquisition during the event window.
- There is no announcement of capital investment in a new project, credit rating and financial results during the event window.
- To avoid possible information contamination or the confounding effect, the firms that undertake any significant event such as announcements of bonus shares, dividends or ex-dates on any type of dividend (cash/ stock dividend), within twenty days prior and after the acquisition are excluded from the sample.
- The firms must have daily price information available on the Bombay Stock Exchange or Capitaline database. The firms having non-synchronous trading have been eliminated from the sample.

These filters reduce the dataset to a very small sample of 14 announcements comprising 10 cross-border and 4 domestic acquisitions using innovative financing as a mode of payment.

Table 1: Sample Selection

Total number of announcements	44
Less acquisitions excluded:	
Rumours and news of acquisitions withdrawn subsequently	9
Minor acquisitions	2
Acquisition by financial companies	1
Acquisition by unlisted companies and investor groups	6
Trading data not available	2
Confounding events	5
Multiple acquisitions in one announcement	4
Date could not be verified	1
Selected in sample (44-30)	14

Objective, Hypotheses and Methodology

The objective of the present paper is to examine short-term abnormal returns to the shareholders of acquiring companies using a combination of cash and stock; the disaggregate analysis for such returns has also been attempted for domestic acquisitions and cross-border acquisitions. The period of the study is 2003-08.

The following hypotheses have been tested to investigate the average effect of the announcements of acquisitions on the acquirers' shareholders wealth.

H_{01}: There is no average abnormal return on the announcement day due to the announcements of and acquisitions to the acquirers' shareholders.

$$AR_{i,t} = R_{i,t} - (\hat{\alpha}_i + \hat{\beta}_i R_{m,t})$$

H_{02}: There is no cumulative average abnormal return for the event window period due to announcements of acquisitions to the acquirers' shareholders.

The event study methodology is used to examine short-term stock price reaction to mergers and acquisitions announcements. The traditional market model with value weighted market index (BSE SENSEX) has been used to estimate abnormal return. The traditional market model to estimate abnormal returns as per equation (1) is:

$$R_{i,t} = \hat{\alpha}_i + \hat{\beta}_i R_{m,t} + \varepsilon_{i,t} \qquad (1)$$

Where $R_{i,t}$ is its return for firm i on day t;

$R_{m,t}$ is the corresponding return on the Bombay stock Exchange (BSE) index SENSEX .

$\varepsilon_{i,t}$ is the error term.

t= -280, . . ., -26

The abnormal return (AR) for each day for each firm is then obtained as per equation (2)

where t= -20. . . +20 (2)

Where $\hat{\alpha}_i$ and $\hat{\beta}_i$ are estimated from (1) using data from the appropriate estimation window. Abnormal returns are averaged for each event day across firms (where t=0 is the announcement

day when it is first time announced in the public news paper) and Cumulative Abnormal Returns (CARs) are computed by summing average abnormal returns for the window of interest.

The estimation period for the parameter estimation is constructed in the following manner. We start with an announcement date such as t=0. An estimation period window of 255 days is then constructed for a defined period such as the pre-acquisition period trading day -280 to -26; it implies 280 trading days prior to announcement date ending 25 trading days before announcement date as shown in the Figure 1.

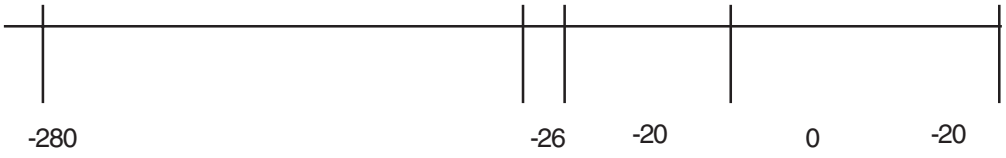

Figure 1: Time Line for an Event Study

The average abnormal return (AAR_t) for each day in the event window is calculated as follows:

$$AAR_t = \frac{1}{N}\sum_{j=1}^{N} AR_{jt} \qquad (3)$$

where N is the number of firms.

In order to make inferences about the effect of the announcement, the abnormal returns have been cumulated across time for each security (if the event window covers more than one period) and across securities. The measure of abnormal returns in this paper uses windows for varied sets of time period (in days), namely, (-20, -2), (-1, 0), (-1,+1), (-2,+2), (-5,+5) (-10, +10), (-20, +20) and (+2, +20) period. The larger window of pre- event and post-event 18 days includes the effect of possible leakage of the information and also captures any adjustment to the share price (if any) following the announcement.

The cumulative abnormal returns (CARs) are daily abnormal returns cumulated over part of the event period. Over an interval of two or more trading days beginning with day T_1 and ending with day T_2, the cumulative average abnormal return (CAAR) is

$$CAAR_{T_1, T_2} = \frac{1}{N}\sum_{j=1}^{N}\sum_{t=T_1}^{T_2} AR_{jt} \qquad (4)$$

Statistical Significance of Event Returns

There are numerous tests for evaluating the statistical significance of abnormal returns. Each tests the null hypothesis that abnormal returns are zero, but they differ in the necessary assumptions about the statistical properties of (abnormal) returns. The parametric tests implicitly assume that the residuals follow normal distribution. When the assumption of normality of abnormal returns is violated, parametric tests are not well specified. In addition to parametric statistics, event studies typically report a nonparametric test. A non-parametric test is normally used in conjunction with parametric test in event study to verify that the results are not driven by outliers. Nonparametric statistics do not require as stringent assumptions about return distributions as parametric tests. In order to obtain robust results, one parametric Crude dependence adjustment test (Brown and Warner, 1980) and one non-parametric Generalized Sign (Cowan,

1992) test has been applied.

The Crude Dependence Adjustment Test (CDA)

The test incorporates the sample time-series standard deviation. Brown and Warner (1980) describe the test as featuring a "crude dependence adjustment." That is, the test compensates for potential dependence of returns across security-events by estimating the standard deviation using the time series of sample mean returns from the estimation period. CDA test uses a single variance estimate for the entire sample. Therefore, the time series standard test does not take account of the unequal return variances across securities. This test avoids the potential problem of cross-sectional correlation of security return. To account for the dependence across firms' average residuals, in event time, Brown and Warner (1980) suggest that the standard deviation of average residuals should be estimated from the time series of the average abnormal returns over the estimation period. The estimated variance of AAR_t is

$$\hat{\sigma}^2_{AAR} = \frac{\sum_{t=-280}^{-26}\left(AAR_t - \overline{AAR}\right)^2}{254} \qquad (5)$$

Where the market model parameters are estimated over the estimation period of 255 days and

$$\overline{AAR} = \frac{\sum_{t=-280}^{-26} AAR_t}{255} \qquad (6)$$

The test statistics for day t in event time is

$$t = \frac{AAR_t}{\hat{\sigma}_{AAR}} \qquad (7)$$

The CDA test for the null hypothesis that CAAR=0 is

$$t = \frac{CAAR_t}{(T_2 - T_1 + 1)^{\frac{1}{2}}\hat{\sigma}_{AAR}} \qquad (8)$$

Generalized Sign Test (GSign Z)

The generalized sign test compares the proportion of positive abnormal returns around an event to the proportion from a period unaffected by the event. The generalized sign test adjusts for the fraction of positive abnormal returns in the estimation period instead of assuming 0.5.

The null and alternative hypotheses of interest are:

The null hypothesis for generalized sign test is that fraction of positive returns is the same as in the estimation period. The actual test uses the normal approximation to the binomial distribution. To implement this test, we first need to determine the proportion of stocks in the sample that should have non-negative abnormal returns under the null hypothesis of no abnormal performance. The value for the null is estimated as the average fraction of stocks with non-negative abnormal returns in the estimation period. If abnormal returns are independent

across securities, under the null hypothesis the number of non-negative values of abnormal returns has a binomial distribution with parameter p.

The generalized sign test examines whether the number of stocks with positive cumulative abnormal returns in the event window exceeds the number expected in the absence of abnormal performance. The number expected is based on the fraction of positive abnormal returns in the 255 day estimation period,

$$\hat{p} = \frac{1}{n}\sum_{j=1}^{n}\frac{1}{255}\sum_{t=1}^{255}S_{jt} \qquad (9)$$

Where

$$S_{jt} = \begin{cases} 1 & if \ \ \mathrm{AR}_{jt} > 0 \\ 0 & otherwise \end{cases}$$

The following statistic has an approximate unit normal distribution with parameter :

$$Z_0 = \frac{w - n\hat{p}}{\sqrt{n\hat{p}(1-\hat{p})}} \qquad (10)$$

Where w is the number of stocks in the event window for which the cumulative abnormal return is positive

The alternative hypothesis, for any level of abnormal performance, ***is that fraction of positive returns is different from the fraction in the estimation period***

Empirical Results

Average abnormal returns on the announcement day and cumulative average abnormal returns (CAARs) for various event windows have been analyzed for all acquisitions financed with a combination of cash and stock. In addition, the abnormal returns have been analysed for sub-samples of cross-border acquisitions and domestic acquisitions.

Table 2 reports the abnormal returns to the acquirer shareholders on the announcement day for complete sample as well as sub-samples. It contains average abnormal return and median abnormal return on the announcement day. Additionally, it presents proportion of positive and negative average abnormal return. Moreover, it provides the results of two tests conducted to measure statistical significance for average abnormal returns.

It is obvious from the data summarized in the Table that acquirer shareholder earn substantial return of 4.03 per cent on the announcement day. Median abnormal returns are 3.55 percent. Returns are positive for more than 78 per cent stocks. Moreover, the results are statistically significant.

It is also evident from the Table that returns are higher in the case of domestic acquisitions.

Cumulative average abnormal returns for multi-period event windows have been analysed for complete sample as well as for cross-border acquisitions and domestic acquisitions. Table 3 contains cumulative average abnormal return and median cumulative abnormal return for various event windows. Additionally, it presents proportion of positive and negative cumulative average abnormal return. Moreover, it provides the results of two tests conducted to measure statistical

Table 2: Abnormal Returns to the Shareholders of Acquiring Firms on the Announcement Day, 2003-2008

N	Average abnormal return	Median abnormal return	Positive: Negative	T_{CDA}	T_G
Panel A: Complete Sample					
14	4.03%	3.55%	11:3	4.296**	2.521**
Panel B: Domestic Acquisitions					
4	6.59%	5.76%	4:0	3.192**	2.197*
Panel C: Cross-border acquisitions					
10	3.01%	2.83%	7:3	3.013**	1.594

* and **Denotes significance at 5 and 1% levels, respectively.

significance for cumulative average abnormal returns.

The relevant data shows that the acquirer experience 5.29 per cent cumulative average abnormal return over the event window of 5 days (-2,2). The notable finding is that the median cumulative abnormal return is 5.48 per cent. More than 78 per cent stocks have positive returns. Moreover the results are statistically significant at 1 per cent.

Another notable finding is that returns are positive and impressive (15.66 per cent) over the longer window of 41 days; the CAAR is statistically significant at 1 per cent as per CDA test. However, the proportion of positive return is not significant.

Figure 2 present the average abnormal return for the entire event window. The graph portrayed in Figure 3 supports the conclusion that acquirer shareholders experience substantial gain when acquisition is financed with some innovative method.

Table 3: Cumulative Abnormal Returns to the Shareholders of Acquiring Firms during Multi-Days Event Windows, 2003-2008

Event window	Cumulative average abnormal return	Median cumulative abnormal return	Positive: Negative	T_{CDA}	T_G
(-20,-2)	7.61%	3.82%	8:6	1.861*	0.91
(-1,0)	4.88%	3.35%	10:4	3.679**	1.984*
(-1,+1)	4.82%	4.38%	11:3	2.969**	2.521**
(-2,+2)	5.29%	5.48%	11:3	2.524**	2.521**
(-5,+5)	6.98%	5.70%	8:6	2.244*	0.91
(-10,+10)	9.83%	7.78%	9:5	2.288*	1.447
(-20,+20)	15.66%	8.14%	8:6	2.607**	0.91
(+2,+20)	3.23%	-5.39%	6:8	0.79	-0.165

* and **Denotes significance at 5 and 1% levels, respectively.

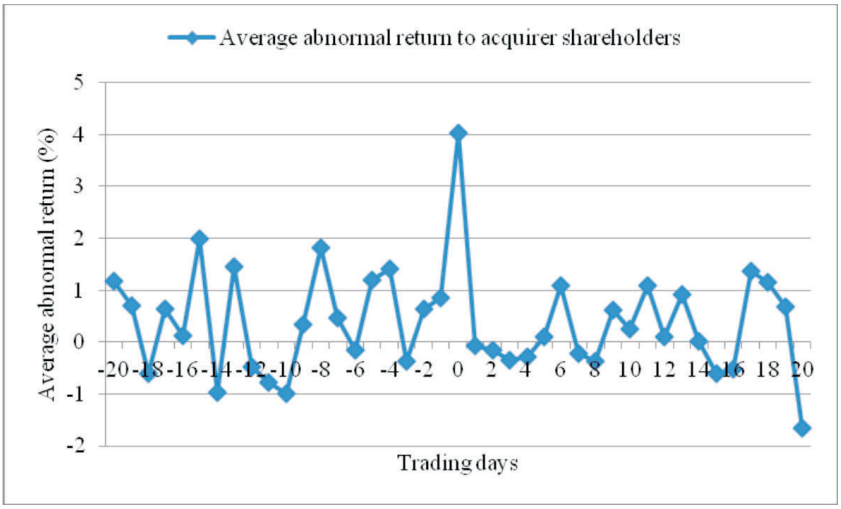

Figure 2: CAAR of Acquisitions Financed with a Combination of Cash and Stock Over Event Window (-20, +20).

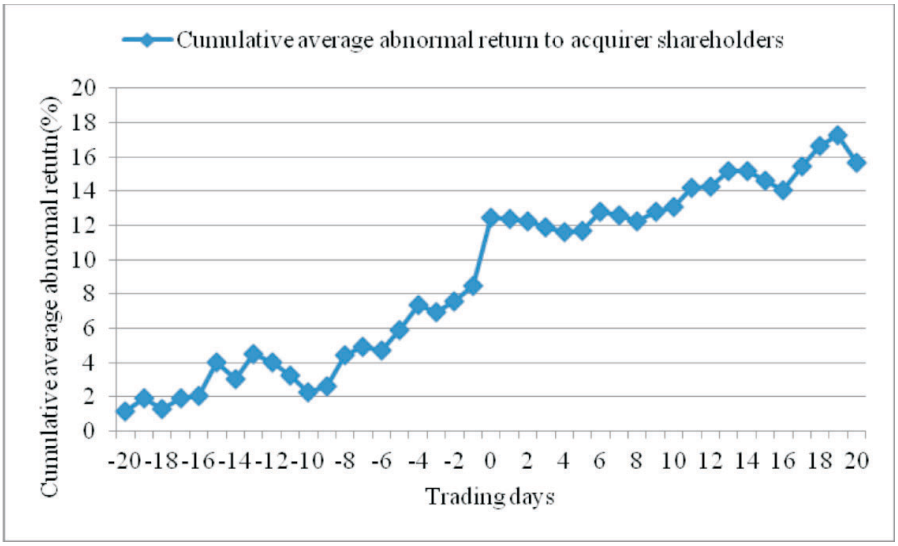

Figure 3: CAAR of Acquisitions Financed with a Combination of Cash and Stock Over Event Window (-20, +20).

The data contained in Table 4 shows the return for domestic acquisitions financed with combination of cash and stock. It is evident from the Table that returns are positive during all the event-windows. The shareholders earn cumulative abnormal return of 10.28 per cent during event window of 5 days (-2, 2). Moreover, the proportion of stocks having positive return is 100 per cent. The results are statistically significant at 5 per cent.

The graph of average abnormal return during the event window of (-20,20) portrayed in Figure 4 also corroborates the above finding of positive return for most of the event days. The graph displayed in Figure 5 also supports the conclusion that shareholders experience positive returns when domestic acquisitions are financed with innovative financing.

Table 4: Cumulative Abnormal Returns to the Shareholders of Acquiring Firms (Domestic Acquisitions) During Multi-Days Event Windows, 2003-2008

Event window	Cumulative average abnormal return	Median cumulative abnormal return	Positive: Negative	T_{CDA}	T_G
(-20,-2)	15.73%	10.90%	3:1	1.749*	1.192
(-1,0)	7.43%	7.10%	4:0	2.545**	2.197*
(-1,+1)	8.47%	8.42%	4:0	2.371**	2.197*
(-2,+2)	10.28%	7.70%	4:0	2.229*	2.197*
(-5,+5)	13.42%	15.13%	3:1	1.961*	1.192
(-10,+10)	21.03%	20.19%	3:1	2.224*	1.192
(-20,+20)	37.68%	35.48%	3:1	2.852**	1.192
(+2,+20)	13.48%	17.24%	3:1	1.499	1.192

* and **Denotes significance at 5 and 1% levels, respectively.

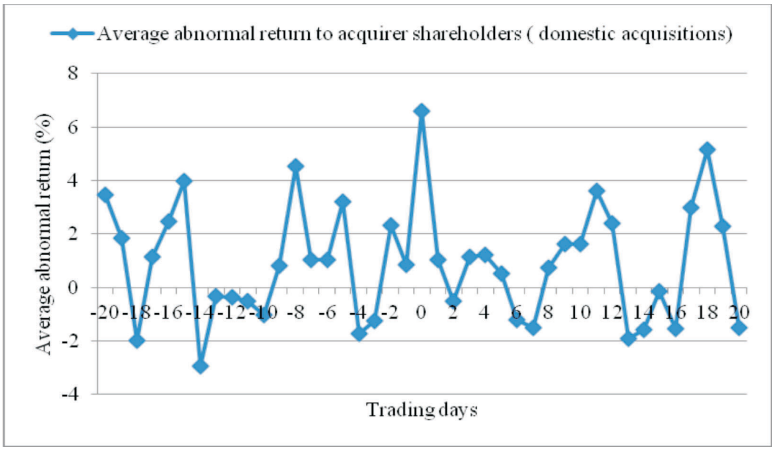

Figure 4: AAR Domestic Acquisitions Financed with a Combination of Cash and Stock over Event Window (-20, +20).

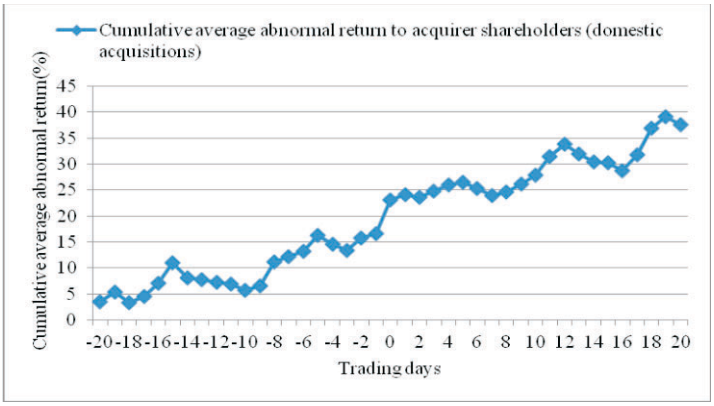

Figure 5: CAAR Domestic Acquisitions Financed with a Combination of Cash and Stock Over Event Window (-20, +20).

Table 5 contains return for the cross-border acquisitions financed with a combination of cash and stock. It is evident from the relevant data the acquirer shareholders earn 3.86 per cent cumulative average abnormal return over the 2 days event window (-1, 0). However the median cumulative returns are 1.97 per cent. Moreover, the proportion of stocks having positive return is not different from the proportion of stocks having positive return during the estimation period.

The graph of average abnormal return portrayed in Figure 6 shows that the return are positive for most of the days during event-window (-20,20). The cumulative average abnormal return displayed in Figure 7 also supports that the acquirer shareholder earn positive returns during the event window.

Independent t-test has been conducted to measure the difference between mean CAR of domestic acquisitions and cross-border acquisitions; the results are tabulated in Appendix I. Positive mean difference has been noted between the returns; however, the difference is not significant.

Table 5: Cumulative Abnormal Returns to the Shareholders of Acquiring Firms (Cross-Border Acquisitions) During Multi-Days Event Windows, 2003-2008

Event window	Mean cumulative abnormal return	Median cumulative abnormal return	Positive: Negative	T_{CDA}	T_G
(-20,-2)	4.36%	0.43%	5:5	1.002	0.322
(-1,0)	3.86%	1.97%	6:4	2.736**	0.958
(-1,+1)	3.36%	1.91%	7:3	1.947*	1.594
(-2,+2)	3.30%	3.52%	7:3	1.477	1.594
(-5,+5)	4.40%	0.18%	5:5	1.331	0.322
(-10,+10)	5.36%	3.83%	6:4	1.171	0.958
(-20,+20)	6.85%	-0.34%	5:5	1.072	0.322
(+2,+20)	-0.87%	-6.10%	3:7	-0.201	-0.949

* and **Denotes significance at 5 and 1% levels, respectively.

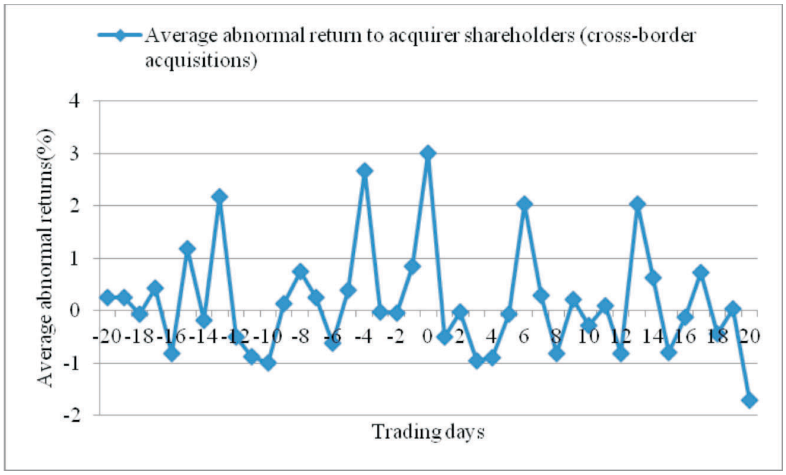

Figure 6: AAR of Cross-Border Acquisitions Financed with a Combination of Cash and Stock Over Event Window (-20, +20).

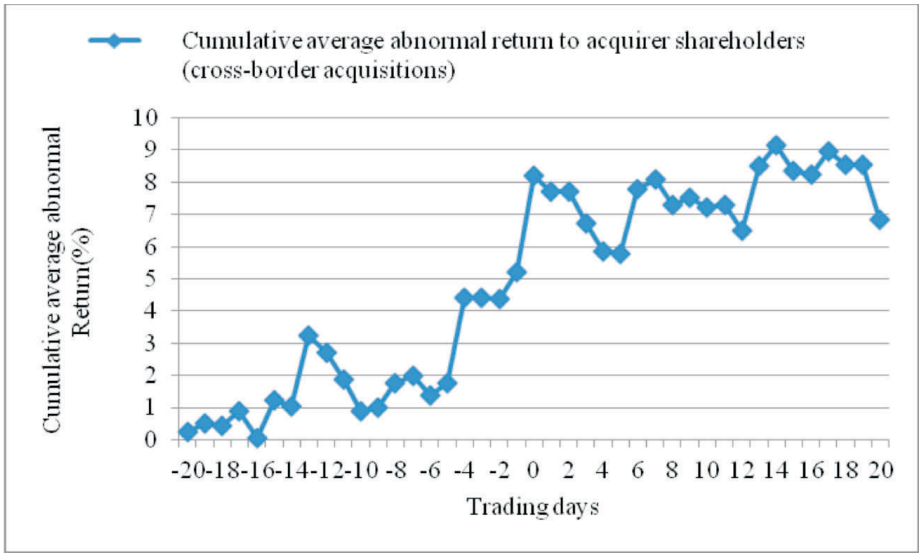

Figure 7: CAAR of Cross-Border Acquisitions Financed with a Combination of Cash and Stock Over Event Window (-20, +20).

Conclusions and Implications

This paper examines the short-run stock price performance of 14 Indian acquirer companies employing a combination of cash and stock to finance acquisitions during the period 2003 to 2008. The results indicate acquisitions generate statistically significant positive abnormal returns when a combination of cash and stock is used as a mode of acquisition.

The study documents that the shareholders of acquirer Indian corporates employing innovative financing experience positive abnormal return of 4.03 percent (statistically significant) on the announcement day. The cumulative average abnormal returns are 5.29 per cent (statistically significant at 1 per cent) for 5 days window. The abnormal returns are also quite impressive of more than four per cent during the pre- event window as well as multi- days event window of 2 days (-1, 0), 3 days (-1, +1); moreover, they are statistically also significant.

The cumulative average abnormal returns are also positive for longer event windows of 11 days (-5,+5) days, 21 days (-10, +10) days and 41 days (-20, +20) days.

The returns for domestic acquisitions is also positive during the pre- event window as well as multi- days event window of 2 days (-1, 0), 3 days (-1, +1), 5 days (-2, +2).

The notable finding of disaggregated analysis is that the acquirer earns almost ten percent CAAR (significant at 5 per cent) for event window of 5 days (-5, +5) in case of domestic acquisitions. The abnormal returns are positive for cross-border acquisitions also; however not statistically significant.

Another notable finding of the study is that the acquirers experience higher return for domestic acquisitions; however, the difference is statistically not significant.

Above all, on a methodological level, the present study has demonstrated use of the non-parametric significance tests to check the robustness of average abnormal returns and cumulative average abnormal returns. The use of Generalized-sign test for assessing significance levels of average abnormal return and cumulative average abnormal return has proved useful to bring

into notice the event-induced variance in the sample, as this test-statistics take into account effects due to event-induced variance and offers, therefore, an alternative evaluation of significance.

The study is not free from potential limitations. One limitation of the study is the availability of relatively small sample size. For this reason, these findings cannot be generalized based on this study alone. But these initial findings merit consideration and suggest the need to conduct future research to explore the possibility of innovative financing as an option to enhance shareholders wealth.

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Appendix A

T-test for Difference of Mean CAR of Acquirers of Domestic Acquisitions and Cross-Border Acquisitions Using Innovative Mode of Finance

Event Window	Mean CAR (%) of cross-border acquisitions (N=10)	Mean CAR (%) of domestic acquisitions (N=4)Value	Mean Difference	T Value	Significance Value
AD	0.0659	0.0301	0.0358	1.27	0.2434
(-20,-2)	0.1573	0.0436	0.1137	0.86	0.4371
(-1,0)	0.0743	0.0386	0.0357	1.08	0.3027
(-1,+1)	0.0847	0.0336	0.0511	2.17	0.0513
(-2,+2)	0.1028	0.033	0.0699	1.69	0.1467
(-5,+5)	0.1342	0.044	0.0902	1.43	0.1958
(-10,+10)	0.2103	0.0536	0.1567	1.36	0.2296
(-20,+20)	0.3768	0.0685	0.3083	1.34	0.2505
(+2,+20)	0.1348	-0.00873	0.14353	1.26	0.2487