CHAPTER 7
SUMMARY OF FINDINGS AND CONCLUSIONS

The present chapter provides, in brief, the context and research design of the study along with a summary of the findings of the study and the implications emerging from these findings. It also identifies the contribution and the limitations of the study. Based on these limitations, the attempt has also been made to suggest directions of future research in the area.

7.1. The Context and Research Design

The primary objective of this thesis was to examine the impact of M&A announcement on stock returns and other stock characteristics such as volatility and liquidity. It also attempts to examine whether mode of financing has any bearing on the post-event stock returns. In order to achieve the objectives, the empirical study of this thesis first made an attempt to gain basic understanding of the value creation by M&A by reviewing the theoretical framework and the relevant literature on the market reaction to the M&A announcements. The review underlines the importance of synergies and without the possibility of achieving any kind of synergies, M&A transaction cannot be justified from a shareholder perspective. The review of literature on short-term impact of M&A on shareholder’s wealth suggests that there is lack of consensus regarding the market reaction to the M&A announcement. Moreover, the role of other factors such as mode of financing still remains unresolved by the earlier studies. It was also observed that very few studies have made any attempt to examine the relationship between the returns in the pre-announcement period and post-announcement period. These issues provided the basis for twelve hypotheses that were articulated and tested in this study.

This study is based on the examination of abnormal returns and other stock characteristics of 65 acquirer companies and 37 target companies that were involved in M&A activities during the period 2000-2011, in India. Cross border M&A deals were excluded from the scope of the study. The present study uses event study methodology for measuring the impact of M&A announcement. The studies using event study
methodology need to select an appropriate ‘event window’ for the examination of share price returns and an appropriate ‘benchmark’ to calculate abnormal returns. Market return is generally used as the benchmark return for calculating the abnormal return. Even though there is no overall consistency between the event windows chosen in existing studies, they can be broadly classified as being either short run or long run. The present study uses short run window. For the purpose of this study, the post-announcement period’s cumulative abnormal return (CAR) for each acquirer and target company is calculated as the sum of the abnormal returns over the 21 days from the initial public announcement of the bid including the date of M&A announcement. The event date labeled ‘day 0’ is the date of M&A announcement. CAR was also calculated for pre-announcement period of 20 days from -1 day to -20 day. Daily closing stock price series for the period of 141 days (day -120 to day +20) was used for computing returns. The single factor market (SFM) model has been used for estimating the parameters, because this is the most widely used model for estimating abnormal returns as it is considered to be simple yet robust under various circumstances (Brown & Warner, 1985). Moreover, in the Indian context, the results with multiple-factor model indicated similar result as for single factor model.

7.2. Findings of the Study

The findings of the study can be broadly summarized under three broad heads namely, a) M&A announcement and shareholder’s wealth of acquirer company, b) M&A announcement and shareholder’s wealth of target company and c) Mode of financing and market reaction to M&A announcement.

7.2.1. M&A Announcement and Shareholder’s Wealth: Acquirer Company

The results of this study offer very useful conclusions about the market reaction to M&A announcement for acquirer companies in India. On ex-post basis, individual analysis suggests that there is significant impact of M&A announcement on stock returns for almost half of the sample acquirer companies. In other words, the Indian stock market is not efficient in the semi-strong form with respect to M&A announcement information for acquirer companies. Thus, the investment analyst cannot
ignore the information regarding the M&A deals. The results relating to the direction of price reaction are, however, mixed as positive abnormal returns occur as often as negative abnormal returns on post-event basis. On aggregate basis, CAAR is statistically not significant. It stood at -0.57% (t-statistic= -1.19234) for the twenty-one-days period.

During the pre-announcement period, more than two-third of the sample companies witnessed statistically significant CAR values. Individually, positive CAR occurs more often than the negative CAR during this period. At aggregate level, the CAAR is positive and statistically significant with a value of 4.89% (t-statistic= 9.156947). Thus, the study offers a clinching evidence for existence of significant abnormal returns even before the M&A announcement. The existence of statistically significant CAR in many cases during the pre-announcement period points toward possibility of leakages of M&A information which may be exploited by the market traders on pre event basis.

These findings are consistent with the finding of a number of studies regarding M&As in India (Sehgal, Banerjee & Deisting, 2012; Kumar & Panneerselvam, 2009; Sehgal, Singh & Choudhary, 2005) and M&As abroad (Mitchell & Lehn, 1990; Smith & Kim, 1994; Walker, 2000). It was further observed that the direction of the pre-announcement CAR for the acquirer companies provides useful information regarding the direction of CAR in the post announcement period. The study documents significant relationship between the pre and post-announcement abnormal returns for acquirer companies. Further, it may be generally concluded that for shares of acquiring companies, positive or negative expectations built-up during pre-announcement period tend to die out more quickly than in cases where there are no significant expectations.

As regards the impact of M&A announcement on other stock characteristics, no significant impact was observed on stock return volatility and trading liquidity, in so far as the acquirer companies are concerned. In other words, return volatility and trading liquidity characteristics of sample acquirer stock do not vary significantly in the pre and post-event period. Hence, from the perspective of investment analyst, stock return volatility and trading liquidity do not seem to provide any additional information for framing trading strategies.
An analysis of post-event abnormal returns during various time windows also provides very useful clues for investment analysts. Observing the pattern of post-event CAARs for different short-term event windows, significantly positive CAAR of almost 1.01% (t-statistic=2.00567) is reported over the first 11 days (including the event day). This is in contrast with CAAR during later half of the post event period (-11,-20 day) which was -1.58% (t-statistic= -3.50658). Thus, investors seem to be optimistic in the first phase of post event period, which is followed by correction in the second phase resulting in negative returns. From the perspective of investment analyst, the best portfolio formation window seems to be (-4,0 day), promising a cumulative return of about 2.85% for the 5 day period. Thus, the investment analyst can build profitable trading strategies by taking long positions in acquiring company’s stocks 4 days prior to the M&A announcement date and exit at the end of the event day.

7.2.2. M&A Announcement and Shareholder’s Wealth: Target Company

A number of implications emerge from the results of the study for the shareholders of target companies in India. On ex-post basis, individual analysis suggests that there is significant impact of M&A announcement on stock returns for more than two-third of the target companies in the sample. Hence, semi-strong form of efficiency is defied for Indian equity market in the case M&A information for the target companies, as well. Thus, M&A announcement is an event, which cannot be ignored by any investment analyst and information about the M&A deal can be highly useful in understanding the behavior of stock returns for target companies. The results relating to direction of price reaction are, however, mixed. On aggregate basis, CAARj is positive and statistically significant. It stood at +1.55% (t-statistic = 2.60824) for the twenty-one-days period. This may imply that target companies have stronger bargaining position than the acquirer companies, tilting the terms of M&A deal in favour of target companies.

During the pre-announcement period almost three-fourth (71%) of the sample companies witnessed statistically significant CAR. The results support the contention that there is a possibility of leakage of information even before the announcement of M&A, which should be a matter of concern and investigation for the market regulator.
Individually, positive CAR occurs more often than the negative CAR during this period. On aggregate basis, the CAAR for the target companies was +2.85% (t-statistic= +4.37287) and statistically significant, during the pre-announcement period. These results are consistent as positive CAR occur more often negative CAR in the pre-announcement period. These findings are consistent with the findings of a number of studies regarding M&As in India (Sehgal & Banerjee 2012; Kumar & Panneerselvam 2009; Sehgal, Singh & Choudhary 2005) and M&As abroad (Mitchell & Lehn 1990; Smith & Kim 1994; Walker 2000).

As regards the relationship between the pre and post-announcement abnormal returns for target companies, the study documents that the direction of the pre-announcement CAR for the target companies does provide some clues regarding the direction of CAR in the post announcement. Further, it may be generally concluded that positive expectations built-up during pre-announcement period die out more quickly than the negative expectations. The results also indicate that pre-announcement positive CAR is an early warning of most likely negative or insignificant CAR in the post announcement period, with the exceptions limited to only one-fourth of the cases.

An analysis the stock return volatility and trading liquidity for the sample target companies indicates that there is no significant difference in these stock characteristics, on comparing pre and post event windows. These findings are similar to those for acquirer companies. On careful examination of CAARs over different short-term windows, interesting patterns are observed. CAAR is significant and positive for the first phase of 11 days (0,10 day) in the post event period, while it turns negative and statistically significant in the remaining 10 days (+11,+20 day) of the post event period. These findings are similar to those for acquirer companies and may be explained by over-reaction hypothesis. From the perspective of investment analyst, target company’s stocks provide more profitable trading strategies vis-à-vis the acquirer company’s stocks. The CAAR for the 10 day window (-6,+3 day) is about 9%. Stock trader can develop a trading strategy by going long on shares of target companies 6 days before the M&A announcement and exit by the end of third day in post announcement period.
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7.2.3. Mode of Payment and Market Reaction to M&A Announcement

The individual analysis suggests that the impact of M&A announcement on the stock return of the acquirer’s shareholders is influenced by the mode of financing used by the acquirer company. The post event returns are statistically significant in 57% of the cases in equity financed M&A transactions, whereas this percentage is 53% in cases financed through ‘mixed mode’. M&A transactions financed with ‘Cash only’ mode report significant CAR in only 20% of the cases. Thus, the price reaction seems to be much stronger for non-cash based transactions. This finding on individual basis is consistent with the earlier findings in developed market economies (Andrade et al., 2001). The finding is also consistent with the earlier findings relating to emerging markets (Sehgal, Banerjee & Deisting, 2012). However, on aggregate basis, there are no clear patterns. The post-event CAARs are statistically insignificant for all modes of financing for 21 days post event window, owing to offsetting of almost equal number of significantly positive and negative CAR values for each financing strategy.

On pre-event basis also, the patterns of CAR do differ. In the case of ‘cash only’ financing, the significant abnormal returns are observed only in half of the cases, whereas this proportion is about 3/4th in case of ‘equity only’ and ‘mixed’ mode financing. It is interesting to note that on an aggregate basis (CAARi), results show presence of significant positive abnormal returns during the pre announcement period in all the sub-samples. The CAARi is higher in case of ‘cash only’ financing (9.074%) as compared to that in case of equity and the mixed mode sub samples.

As regards the pre-event CARs, results of individual analysis show that the patterns of CAR in case of ‘cash only’ financed transactions do differ from those in case of transactions financed by other modes of financing. For transactions financed by equity pre-event CAR was significant in 82% of the cases. Significant CAR values were observed for ‘cash only’ mode and ‘mixed’ mode transactions in 60% and 72% of cases respectively. The results re-confirm information leakage in the pre-event period, which seems to be more pronounced in equity-financed transactions. On aggregate basis, pre-event CAARs are statistically significant and positive, confirming pre-event investor optimism about M&A event. Cash financed M&As report highest pre-event CAAR of
9.07% over the 20 days window followed by 4.3% in case of mixed mode financed transactions and 4.1% in the case of equity financed transactions.

Analyzing short-term windows, it was observed that the patterns of abnormal returns for various modes of financing differ in shorter windows as well. For cash financed M&A transactions, strong market reaction is observed only during the beginning of pre-announcement period. On the other hand, equity financed transactions witness strong market reaction during three of the four smaller windows beginning pre-event period till the first half of the post event period. For the mixed mode transactions, second half of post-event window and second half of pre-event window seem to witness stronger market reaction.

7.3. Implications and Suggestions

The study has a number of implications for various stakeholders in M&A transactions. Some of the important implications for the shareholders of the acquirer companies, shareholders of target companies, investment analysts and market regulator are identified in the following paragraphs.

For the shareholders of the acquirer company, the study documents significant abnormal returns in the post-announcement window. The results relating to the direction of price reaction are, however, mixed as positive abnormal returns occur as often as negative abnormal returns on post-event basis. However, on aggregate basis, CAARj is statistically not significant. The study also documents significant relationship between the pre and post-announcement abnormal returns for acquirer companies. The price reaction seems to be much stronger for non-cash based transactions. This implies that shareholders of the acquirer company need to be watchful of such an event. Thus, the decision to continue or exit the investment in the company may be taken, based on factors like mode of financing and the abnormal returns during the pre-announcement period.

The shareholders of target companies may also get a number of clues from the findings of this study. Both, the individual analysis and the aggregate analysis suggest significant abnormal returns for the shareholders of target companies. The results of
individual analysis relating to direction of price reaction are, however, mixed. On aggregate basis, CAARj is positive and statistically significant. This may imply that target companies have stronger bargaining position than the acquirer companies, tilting the terms of M&A deal in favour of target companies. This would also imply that as a shareholder of a company which is likely to be the target for acquisition, one can reasonably expect abnormal returns.

The present study has a number of implications for an investment analyst, who might be looking for abnormal returns based on superior analysis. The study suggests that semi-strong form of efficiency is defied for Indian equity market in the case M&A information for the both the acquirer companies and the target companies. Thus, the investment analyst cannot ignore the information regarding the M&A deals. However, in respect of the direction of abnormal returns, the results are mixed in the individual analysis. Thus, investment analyst should look for specific information regarding M&A deal. Moreover, existence of significant pre-announcement CAR indicates opportunities for abnormal returns, if the analyst is able to pre-judge the possible acquisition, using superior analysis. Further, the results of the study suggest that target company’s stocks provide more profitable trading strategies vis-à-vis the acquirer company’s stocks. It is possible to develop a profitable trading strategy by going long on shares of both acquirer as well as target companies a few days before the M&A announcement and exit by the within a day or so in post-announcement period. The study re-confirms the relationship between abnormal returns in the pre-announcement period and post announcement period. Thus, investment analysts can closely examine the pre-announcement abnormal returns to get some clues regarding the direction of abnormal returns. For example, in case of shares of acquiring companies, the positive or negative expectations built-up during pre-announcement period tend to die out more quickly than in cases where there are no significant expectations. However, for the shares of target companies, positive expectations built-up during pre-announcement period die out more quickly than the negative expectations. The study also points out that the price reaction seems to be much stronger for non-cash based transactions. Further, the price reaction is much stronger during the narrower windows. These finding can help in designing trading strategies.
The existence of significant abnormal returns during pre-announcement period for majority of the sample acquirer companies and target companies points towards the possible leakage of information, much before the public announcement of M&A. This should be a matter of concern for the market regulator like SEBI and attempts should be made to plug such leakage. The defiance of semi-strong efficiency in Indian capital market also points towards the need for improving the efficiency of the market.

7.4. Contribution of the Study

On a number of counts, the present study makes significant contributions to the understanding of the impact of the M&A announcement on stock return and other stock characteristics. This is perhaps one of the very few studies in India which examines both the market reaction to M&A announcement for both the acquirer and target companies. Inclusion of other stock characteristics like stock volatility and trading volume liquidity in its scope also makes the study unique. The study also examines the relationship between the abnormal returns during the pre-announcement period and post announcement period which also sets this study apart from other studies in India. The study also examines the abnormal returns during various narrower windows and thus offers greater insights into the behavior of abnormal returns at various stages of the announcement. The study offers evidence in support of the influence of mode of financing on stock returns around the date of announcement of M&A deals.

7.5. Limitations of the Study

The study, being the one carried out by an individual, suffers from a number of limitations. The major limitation of the study is the limited size of the sample. Inspite of the best efforts, data could be collected only for 65 acquirer companies and 37 target companies. Larger sample could give more opportunities for further classification of the sample and more robust results. One could divide the sample into two periods and compare market reaction to the more recent M&As with those carried out in earlier part of the decade. Moreover, impact of nature of industry could also be examined, if adequate number of cases were available in each industry class. In the present study the focus was on the domestic M&As and excluded cross border M&As. In that sense, the
scope of the study is limited. Further, the focus of the study is only short run reaction. Medium term reaction in terms of impact on weekly returns with larger windows around the date of announcement could improve our understanding from medium term perspective.

7.6. Directions for Future Research

The present study provides a number of clues regarding the direction of future research. This study focused on the domestic M&As. A study comparing the market reaction to domestic and cross border M&As announcement may provide a useful understanding of impact of M&A announcements. A study that compares the reaction of the more recent M&As with the ones carried say a decade back may throw light on how the market reaction has changed over time. Is the reaction aligning with that documented by the recent studies in developed markets? Another research question that deserves attention of researchers is the relationship between the proportion of the shares in target company acquired and the market reaction. Does the major share acquiring M&As deals are perceived differently than those where the acquirer gets less than 50% shares in the target company.
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References


