Value for Shareholders Through Mergers & Acquisitions

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Abstract

This paper aims to analyze the behavior of stock returns in mergers and acquisitions. Companies are trying to consolidate themselves in the areas of their core competence and divest those businesses where they do not have any competitive advantage. Consequently, as an option, mergers and acquisitions has emerged as a key corporate activity. One plus one makes three, this equation is the special alchemy of a merger or an acquisition. Many studies have been conducted to assess the value creation when two or more companies merge, or when one company acquires another. Most of these studies have concentrated on combined benefits of both the acquiring and target companies, or more specifically the acquiring companies. It is equally important to analyze value creation from the view point of the target company's shareholders. The paper analyses the value creation for target companies' shareholders in the Indian context.

Keywords: *Merger, Acquisition, Synergy, Shareholder Value Creation, Nifty, Public Announcement, Open Offer, Takeover.*

Introduction

The phrase Mergers and Acquisitions or M&A refers to the aspect of corporate finance strategy dealing with merging and acquiring of different companies as well as other assets. Usually mergers occur in a friendly setting where executives from the respective companies participate in a due diligence process to ensure a successful combination of all parts.

Historically, though, mergers have often failed to add significantly to shareholder value. Researchers have studied the effects of takeovers on the value of both the target and bidder firms. Jarrell, Brickley and Netter, in their examination of tender offers from 1962 to 1985, noted a decline in excess returns to bidding firm stockholders from 4.4% in the 1960s to 2% in the 1970s to -1% in the 1980s. Other studies indicate that approximately half of all bidding firms earn negative excess returns around the announcement of takeovers, suggesting that shareholders are skeptical about the perceived value of the takeover in a significant number of cases.

The studies also indicate that the stockholders of target firms are the clear winners in takeovers they earn significant excess returns not only around the announcement of the acquisitions, but also in the weeks leading up to it. Jarrell, Brickley, and Netter (1988) reviewed the results of 663 tender offers made between 1962 and 1985 and noted that premiums averaged 19% in the 1960s, 35% in the 1970s and 30% between 1980 and 1985. Jensen and Ruback (1983) reviewed 13 studies that looked at returns around takeover announcements and reported an average excess return of 30% to target stockholders in successful tender offers and 20% to target stockholders in successful mergers.

The process of acquisition or takeovers involves a number of different transactions. These transactions can range from one firm merging with another firm to create a new firm or managers of a firm acquiring the firm from its stockholders and creating a private firm. One plus one makes three, this equation is the special alchemy of a merger or an acquisition.

There are several ways in which a firm can be acquired by another firm:

In a **merger**, the boards of directors of two firms agree to combine and seek stockholder approval for the combination, for eg., Digital Computers was absorbed by Compaq after it was acquired in 1997. In most cases, at least 50% of the shareholders of the target and the bidding firm have to agree to the merger.

In a **consolidation**, a new firm is created after the merger and both the acquiring firm and target firm stockholders receive stock in this firm. Citigroup, for instance, was the firm created after the consolidation of Citicorp and Travelers' Insurance Group.

In a **tender offer**, one firm offers to buy the outstanding stock of the other firm at a specific price and communicates this offer in advertisements and mailings to stockholders. By doing so, it bypasses the incumbent management and board of directors of the target firm.

In **purchase of assets**, one firm acquires the assets of another, though a formal vote by the shareholders of the firm being acquired is still needed; the Asset Purchase Agreement by and between Samsung Electronics Company Ltd. and the 3do Company dated April 1997.

Developing an Acquisition Strategy

Not all firms that make acquisitions have acquisition strategies, and not all firms that have acquisition strategies stick with them. A number of different motives for acquisitions have to be considered and a coherent acquisition strategy has to be based on one or another of these motives.

Acquire Undervalued Firms

Firms that are undervalued by financial markets can be targeted for acquisition by those who recognize this mispricing. The acquirer can then gain the difference between the value and the purchase price as surplus. For this strategy to work, however, three basic components need to come together:

1. *A capacity to find firms that trade at less than their true value.*
2. *Access to the funds that will be needed to complete the acquisition.*
3. *Skill in execution.*

Diversify to Reduce Risk

By buying firms in other businesses and diversifying, acquiring firms' managers believe, they can reduce earnings volatility and risk, and increase potential value. Although diversification has benefits, it is an open question whether it can be accomplished more efficiently by investors diversifying across traded stocks, or by firms, diversifying by acquiring other firms. If the transactions costs associated with investor diversification are compared with the costs and the premiums paid by firms doing the same, investors in most publicly traded firms can diversify far more cheaply than firms can.

Create Operating or Financial Synergy

The third reason to explain the significant premiums paid in most acquisitions is synergy. Synergy is the potential additional value from combining two firms. Firms can create Operating & Financial Synergy due to Economies of scale, Greater pricing power, higher growth in new or existing markets, Debt capacity and Tax benefits.

Payment for the Target Firm

Once a firm has decided to pay a given price for a target firm, it has to follow up by deciding how it is going to pay for this acquisition. In particular, a decision has to be made about the following aspects of the deal:

a) Debt versus Equity: A firm can raise the funds for an acquisition from either debt or equity. The mix will generally depend upon both the excess debt capacities of the acquiring and the target firm.

b) Cash versus Stock: There are three ways in which a firm can use equity in a transaction. The first is to use cash balances that have been built up over time to finance the acquisition. The second is to issue stock to the public, raise cash and use the cash to pay for the acquisition. The third is to offer stock as payment for the target firm, where the payment is structured in terms of a stock swap shares in the acquiring firm in exchange for shares in the target firm. The question of which of these approaches is best utilized by a firm depends upon availability of cash on hand, perceived value of stock & tax.

Reasons for Failure of Mergers

There are a number of reasons why mergers fail, but these seem to be the most common reasons:

- *Lack of a post-merger plan to deliver on synergy and control*
- *Lack of Accountability*
- *Culture Shock*
- *Failure to consider external constraints*

Scope of the Study

The project is restricted to companies in India only and the reference time period taken is the last 10 yrs (up to Dec 2005).

Need

Mergers and acquisition deals on an average have the potential to enhance shareholder value. While there are many popular ways to measure the value created by mergers , the short run stock performance of the bidder , the target and the combined entity is the most widely used method. The short run stock performance is widely viewed as the most reliable evidence of value creation because in an efficient capital market, stock prices quickly adjust to new information and incorporate any changes in value that mergers are expected to bring.

Most studies have concentrated on analyzing the benefits of the bidder and the combined entity. It is equally important to analyze the value creation from the viewpoint of the shareholders of the target company. There is a need to study this aspect in detail in the Indian context.

Objective

The objective of the present study is to attempt on the value creation in mergers and acquisition from the viewpoint of the target company. This study compares the share prices of the firms before and after the public announcements for open offers.

Hypothesis

The project uses differing time windows to test the hypothesis, one month on either side, 20 days on either side and 10 days on either side of the public announcement.

Null Hypothesis -H_0

There is no significant increase in share prices of the target company, pre and post public announcements (Time Window: 30 calendar days, 20 calendar days and 10 calendar days, either side of announcement), implying there is no value addition.

Alternate Hypothesis -H_1

There is an increase in share prices of the target company, pre and post public announcements (Time Window: 30 calendar days, 20 calendar days and 10 calendar days, either side of announcement), implying there is value addition.

Review of Literature

The study of mergers and acquisitions focuses on understanding what motivates managers to engage in this type of activity and the impact that mergers and acquisitions have on shareholder returns. Managers motivations for mergers could be empire building through growth in size, sales, and assets. Managers choose to merge or acquire for potential market gains, for overcoming technological barriers and gaining a technological edge, as well as for building diversification on existing strengths. Efficiency improvements can be gained from synergy of target and bidding firms due to economies of scale and use of excess capacity. For example, vertical mergers create economies of scale by enabling more efficient coordination of the members of the vertical chain.

Various researchers (Dennis & McConnell, 1986; Dodd, 1980) conclude that, as a result of merger, the returns go to target firms. Returns to target shareholders range from 20-30% (Dodd & Ruback, 1977; Dodd, 1980; Bradley & Wakeman, 1983; Jensen & Ruback, 1983;

Malatesta, 1983). On the other hand, the impact of merger on returns for the acquiring firms has largely been either significantly negative (Dodd, 1980; Firth, 1980; Eger, 1983) or insignificantly positive (Asquith, 1983; Eckbo, 1983; Dennis & McConnell, 1986).

Limitations

The study is confined to listed companies in Nifty only. It is not generalisable for unlisted Public Ltd and Private Ltd Companies.

Data Source

Samples have been selected from the database available at the SEBI website. The criteria for selection were:

Actively traded listed companies.

Recent acquisitions (last 10 yrs only) up to Dec 2005.

Representation of various industry sectors.

Data Collection and Analysis

The data collected for the study is secondary in nature. Websites of SEBI, Bombay Stock Exchange and National stock Exchange have been used for data collection. The data analysis has been conducted for different time windows of one calender month, 20 trading days and 10 trading days, each on either side of the announcement to weed out short term effectsof the annoucements. Annexures 1,2 and 3 given at the end of the study, summarises the data collected during the course of the study. Various tests of significance have been carried out to analyse value creation for target companies.

The findings of the study are as follows:

One-Month Window

There is a significant value creation for the target company's shareholders due to the public announcement. In 93% of the cases, the share price of the target company increased after the announcement. An upper tailed paired samples t test carried out to test the significance of difference in means of share prices of the target companies' pre and post announcement confirmed that there is indeed an increase in the share prices of target companies after the public announcement.

20-Day Window

There is a significant value creation for the target company's shareholders due to the public announcement. In 86% of the cases, the share price of the target company increased after the announcement. An upper tailed paired samples t test carried out to test the significance of difference in means of share prices of the target companies' pre and post announcement confirmed that there is indeed an increase in the share prices of target companies after the public announcement.

10-Day Window

There is no significant value creation for the target company's shareholders due to the public announcement. Although in 80% of the cases, the share price of the target company increased after the announcement. An upper tailed paired samples t test carried out to test the significance of difference in means of share prices of the target companies' pre and post announcement confirmed that there is no significant increase in the share prices of target companies after the public announcement. It can be seen that the share prices have increased yet the increase has not been significant.

Conclusion

Similar studies can be carried out on a larger set of mergers and acquisition deals. The general motives behind the merger and acquisition process among Indian companies can be explored. The profitability of the target and bidder firm can be investigated for different kind of strategies like tender offer, related mergers, unrelated mergers or conglomerates. These returns can be studied both for the short term as well as the long term and the performance compared. Other tools can also be used to calculate the synergy generated by such deals.

Also acquisitions take several forms and occur for different reasons. Acquisitions can be categorized, based upon what happens to the target firm after the acquisition. A target firm can be consolidated into the acquiring entity (merger), create a new entity in combination with the acquiring firm or remain independent (buyout).

There are four steps in analyzing acquisitions:

First, specify the reasons for acquisitions and list five motives: the undervaluation of the target firm, benefit from diversification, the potential for synergy, the value created by changing the way the target firm is run and management self-interest.

Second, choose a target firm whose characteristics make it the best candidate, given the motive chosen in the first step.

Third, value the target firm, assuming it would continue to be run by its current managers and then revalue it assuming better management. Define the difference between these two values as the value of control. Also value each of the different sources of operating and financial synergy and consider the combined value as the value of total synergy.

Fourth, look at the mechanics of the acquisition. Examine how much the acquiring firm should consider paying, given the value estimated in the prior step for the target firm, including control and synergy benefits. Also look at whether the acquisition should be financed with cash or stock, and how the choice of the accounting treatment of the acquisition affects this choice.

Table 1

Sample Of Target Companies

S.No	Target Company	Acquirer	Issue Size (Rs Cr)	Announcement Date
		Cement		
1	Associated Cement Company Ltd	Holcim Cements India Pvt Ltd, Holcim Mauritius Ltd, Ambuja Cements India Ltd , Gujarat Ambuja Cements Ltd.	2564.04	27 Jan 2005
		Metals		
2	Indian Aluminium Company Ltd	Hindalco Industries Ltd.	266	25 Jul 2002
		Fertilizers		
3	Indo Gulf Fertilizers Ltd.	TGS Investments & Trade Pvt Ltd , Hindalco Industries Ltd (PAC) , Grasim Industries Ltd (PAC) , Indian Rayon & Industries Ltd (PAC)	67.64	24 Jun 2003
		Beverages		
4	Shaw Wallace & Company Ltd	McDowell , Phipson , United Spirits	312	23 Feb 2005

		Media		
5	**Balaji TeleFilms Ltd**	**Asian Broadcasting FZ Llc**	**117.38**	**25 Aug 2004**
		Power		
6	**BSES Ltd**	**Reliance Industries Ltd , Reliance Power Ventures Ltd , Reliance Industrial Investments & Holdings Ltd**	**742.8**	**20 Dec 2002**
		Rating Agencies		
7	**CRISIL Ltd**	**The McGraw-Hill Companies Inc , S&P India LLC**	**323.22**	**15 Feb 2005**
		Tele Communications		
8	**Hughes TeleCom (India) Ltd , Hughes Ispat Ltd**	**Tata Teleservices Ltd, Tata Sons Ltd (PAC), Tata Power Co Ltd (PAC)**	**199.84**	**02 Jul 2002**
9	**VSNL**	**Panatone Finvest Ltd , Tata Sons Ltd , Tata Industries Ltd (PAC) , Tata Iron & Steel Co Ltd (PAC)**	**1151.40**	**12 Feb 2002**
10	**Tata Telecom Ltd**	**Avaya Mauritius Ltd & Pacs**	**62.62**	**12 Apr 2004**
		IT		
11	**I-Flex Solutions Ltd**	**Oracle Global , Oracle Corporation (PAC)**	**1022.68**	**2 Aug 2005**
		Petroleum		
12	**Indian Petrochemicals Corporation Ltd**	**Reliance Petroinvestments Ltd , Reliance Industries Ltd (PAC) , Reliance Ventures Ltd (PAC)**	**1146.8**	**21 May 2002**
		Engineering		
13	**Larsen & Toubro Ltd**	**Grasim Industries Ltd, Samruddhi Swastik Trading & Investments Ltd**	**964.86**	**14 Oct 2002**
		Automobiles		
14	**Swaraj Mazda Ltd (Swaraj Vehicles Ltd)**	**CDC Agri & Sarf & Pacs**	**82.58**	**5 Oct 2004**
		Healthcare		
15	**TTK Healthcare Ltd**	**Mr T T Jagannathan & Pacs , Partners of TTK & Company**	**4.96**	**30 Sep 2004**

Appendix 1
Data for Sample Companies
(One-Month Time Window)

Data for share prices and Nifty pre and post announcement quotes is derived as follows :

- Share price = Σ [Daily closing price x number of shares transacted on that day (On NSE or BSE as per data availability)] / Total number of shares sold during that period.
- Nifty is the average of the closing Nifty's during that period

S NO	TARGET COMPANY	SHARE PRICE		NIFTY		SHARE PRICE % INCREASE	NIFTY % INCREASE
		Pre - Announcement	Post – Announcement	Pre - Announcement	Post – Announcement		
1	Associated Cement Company Ltd	346.5	366.6	1995.32	2062.4	5.8%	3.36%
2	Indian Aluminium Company Ltd	111.2	114.94	3257.78	3026.66	3.36%	-7.1%
3	Indo Gulf Fertilizers Ltd.	57.71	68.8	1041.96	1138.97	19.22%	9.31%
4	Shaw Wallace & Company Ltd	197.7	223.59	6521.17	6744.72	13.1%	3.43%
5	Balaji TeleFilms Ltd	84.35	93.12	1614.77	1673.26	10.4%	3.62%
6	BSES Ltd	216.13	225.71	1052.73	1087.36	4.43%	3.3%
7	CRISIL Ltd	536.18	678.22	2014.43	2105.28	26.49%	4.51%
8	Hughes TeleCom (India) Ltd, Hughes	7.47	6.59	1066.04	1024.93	-11.78%	-3.86%
9	VSNL	164.89	175.29	1092.14	1166.38	6.31%	6.8%
10	Tata Telecom Ltd	212.76	221.94	1769.84	1821.26	4.31%	2.91%
11	I-Flex Solutions Ltd	857.8	980.71	2240.58	2363.23	14.33%	5.47%
12	Indian Petro chemicals Corporation Ltd	124.14	152.11	1101.75	1060.55	22.53%	-3.74%
13	Larsen & Toubro Ltd	173.38	190.73	3005.19	2949.4	10%	-1.86%
14	Swaraj Mazda Ltd	297	307.71	5482.10	5720.77	3.6%	4.35%
15	TTK Healthcare Ltd	25.53	33.93	5389.91	5701.55	32.9%	5.78%

Appendix 2
Data for Sample Companies
(20-Day Time Window)

S NO	TARGET COMPANY	SHARE PRICE		NIFTY		SHARE PRICE % INCREASE	NIFTY % INCREASE
		Pre - Announcement	Post – Announcement	Pre - Announcement	Post – Announcement		
1	Associated Cement Company Ltd	348.42	367.49	1942.38	2065.33	5.5%	6.33%
2	Indian Aluminium Company Ltd	112.07	117.25	3258.1	3002.09	4.6%	-7.86%
3	Indo Gulf Fertilizers Ltd.	58.25	68.76	1044.95	1139.52	18.04%	9.05%
4	Shaw Wallace & Company Ltd	199.42	225.74	6598.44	6773.19	13.2%	2.65%
5	Balaji TeleFilms Ltd	95.52	92.07	1611.77	1646.06	-3.6%	2.13%
6	BSES Ltd	219.29	225.97	1066.86	1089.68	3.05%	2.14%
7	CRISIL Ltd	552.92	678.7	2046.16	2078.37	22.75	1.6%
8	Hughes TeleCom (India) Ltd, Hughes Ispat Ltd	7.5	6.6	1068.39	1054.92	-12%	-1.26%
9	VSNL	161.32	175.26	1089.81	1161.54	8.6%	6.6%
10	Tata Telecom Ltd	215.28	224.82	1777.16	1850.76	4.43%	4.14%
11	I-Flex Solutions Ltd	864.86	983.61	2255.44	2363	13.73%	4.8%
12	Indian Petro chemicals Corporation Ltd	127.28	152	1104.91	1051.47	19.42%	-4.84%
13	Larsen & Toubro Ltd	171.53	186.52	2981.79	2943.07	8.74%	-1.3%
14	Swaraj Mazda Ltd (Swaraj Vehicles Ltd)	296.51	305.54	5558.71	5702.3	3.05%	2.6%
15	TTK Healthcare Ltd	26.66	34.09	5497.3	5721.86	27.87%	4.09%

Appendix 3
Data for Sample Companies
(10-Day Time Window)

S NO	TARGET COMPANY	SHARE PRICE Pre - Announcement	SHARE PRICE Post – Announcement	NIFTY Pre - Announcement	NIFTY Post – Announcement	SHARE PRICE % INCREASE	NIFTY % INCREASE
1	Associated Cement Company Ltd	351.04	363.64	1926.62	2055.78	3.6%	6.7%
2	Indian Aluminium Company Ltd	113.85	117.15	3204.71	3000.74	2.9%	-6.4%
3	Indo Gulf Fertilizers Ltd.	58.29	68.21	1085.37	1128.79	17.2%	4%
4	Shaw Wallace & Company Ltd	214.89	223.6	6607.84	6663.4	4.05%	0.84%
5	Balaji TeleFilms Ltd	92.31	90.89	1593.52	1625.54	-1.54%	2%
6	BSES Ltd	221.73	226.81	1075.29	1089.23	2.3%	1.3%
7	CRISIL Ltd	560.191	679.47	2070.65	2057.64	21.3%	-0.63%
8	Hughes TeleCom (India) Ltd, Hughes Ispat Ltd	7.21	6.6	1056.12	1070.39	-8.5%	1.4%
9	VSNL	170.04	176.54	1105	1154.51	3.8%	4.5%
10	Tata Telecom Ltd	229.27	230.61	1850.22	1866.07	0.59%	0.86%
11	I-Flex Solutions Ltd	860.64	980.87	2301.66	2353.96	14%	2.3%
12	Indian Petro chemicals Corpora-tion Ltd	133.18	151.8	1100.06	1042.82	13.98%	-5.2%
13	Larsen & Toubro Ltd	171.11	186.2	2963.17	2975.86	8.82%	.43%
14	Swaraj Mazda Ltd (Swaraj Vehicles Ltd)	307.32	306.17	5587.83	5727.12	-0.37%	2.5%
15	TTK Healthcare Ltd	27.42	34.53	5543.71	5746	25.94%	3.65%

References

BSE, NSE websites www bse-india com, www nse india com for Stock Quotes

Fama, Eugene F, 1976, 'Foundations of Finance', New York Basic Books

Jensen, M C, and R S Ruback, 1983, 'The Market for Corporate Control The Scientific Evidence', *Journal of Financial Economics, Vol 11 5*

Datta D, Pinches G, Narayanan V, 1992, 'Factors Influencing Wealth Creation from Mergers & Acquisitions A Meta-Analysis', *Strategic Management Journal, Vol 13*

Jose Manual Campa, Ignesio Hernando, 2004, 'Shareholder Value Creation in European M&As', *European Financial Management, Vol 10*

Lacy Glenn Thomas, 1986, 'Mergers and Bidders Wealth Managerial and Strategic Factors', Lexington Lexington Books

SEBI website www sebi gov in for selecting Sample Companies and Announcement dates

Weston, J Fred Twang S, Susan E Hoag, 1996, 'Mergers, Restructuring and Corporate Control', New Delhi Prentice Hall of India

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