

## POST-ACQUISITIONS PERFORMANCE: EMPIRICAL ANALYSIS

\*SUNIL KUMAR, \*\* PROF. JAWAHAR LAL

\*Sunil Kumar is working as Assistant Professor, Department of Commerce, Deen Dayal Upadhyaya College, University of Delhi and pursuing research on Mergers and Acquisitions from Department of Commerce, Delhi School of Economics, University of Delhi.

\*\* Professor Jawahar Lal is the Professor in Department of Commerce, Delhi School of Economics, University of Delhi.

---

### ABSTRACT

Mergers and acquisitions are dynamic strategies that companies may use to enhance their value to stakeholders. To create that value(s), companies may go beyond their generic operations. If there is very minimal or no scope to grow at bottom then companies plan to collaborate with other company (ies). In the present paper, post acquisition performance of share prices of the companies has been investigated. As the share price is the determinant to evaluate the companies' performance and measure of value creation at large. It is generally considered that the operational activities of the company drives the benefits/ loss as financial results and ultimately contribute/ retard to share price. On the other hand the behavior of stock-market also influences the share price of the company. To inspect the post-acquisition performance of the company by taking share price into account and the influence of stock-market, the share price of sixty companies over the period of ten years have been considered. To test the hypotheses, (a) market influence on the companies' share price linear regression model has been used and (b) to evaluate the impact of pre-acquisition performance on post-acquisition results Durbin-Watson technique has been considered.

**Keywords:** Merger, Acquisition, post acquisition performance.

---

### INTRODUCTION

The most apparent vehicle for implementing a growth strategy would be to establish and start up businesses from the scratch. The advantage of this is that such a business position often can be developed relatively inexpensive over time, avoiding major resource outlays. However, a critical problem to that it might takes too much time to develop viable business positions in the national and international markets. It makes good sense only where the appropriate opportunity is available to implement such a green field approach to grow organically. but it turn into the major problem where strong competitors already have been well-established position in the markets, however, it may be too much of an uphill battle to follow this approach. On the other hand, in secondary markets which are not necessarily so overly filled with heavy competition, one may have move of a first mover success, but such peripheral markets are not necessarily of the highest priority in one's global strategy. Accordingly, firms must focus on their resources where it matter the most, either investing their resources into the same business or joining hands with other similar/ different business, or driving benefits by investing in the stock markets. Strategy means making choices, and the choice should be to pursue that one may considers for their own betterment. Thus, although building from scratch may be

feasible, it may not make much strategic sense in some instances especially in case of corporate restructuring.

External restructuring has been motivating factor to expansion-strategies of the businesses. In the focus of the study, M&A are one of the most important and executed strategy among other available alternatives. M&A, as strategy is a means to various possible ends rather than as ends in itself. There are some differences between merger and acquisitions on the basis of the degree of acquiescence of the parties to new corporate arrangement, the survival or loss of identity of one or both of the companies' involved and relative size of the both companies.

Along with these 'mergers' and 'acquisitions' carry different aspect of growth. Merger is permanent arrangement of two different companies to pool their resources, share their strategy and common planning, and follows operating performance- lead strategy. Acquisition may be temporal arrangement to derive the stock-market benefits and follow financial performance-lead strategy. In case of acquisition, acquiring company leads the target company according to own choices by handling control power of the company. Since there is no pooling of resources in case of acquisitions until and unless it's nature is 'acquisition for consolidations'. And resultantly there will be no or minimal losses to the acquirer company if it sells the

shares in the market at below the purchase price in case of critical situations. Unlike acquisitions, in case of merger if companies want to separate their-selves after the settlement it would be turn into losses.

## 2. REVIEW OF LITERATURE

Economic theory generally offers two competing thoughts about the efficiency of takeovers for corporate shareholders. Neoclassical theory views corporate acquisitions as value-enhancing activities in which managers do work to maximize shareholders wealth. This value creation may come from numerous sources viz., cost savings, exercise of increased monopoly power or replacement of inefficient management. In contrast, managerial theories view takeovers as extensions of managers' own personal interest, undertaken for the purpose of increasing their own wealth or prestige by managing a larger post-deal entity.

Takeover is the best strategy to control two different companies' management vis-à-vis remains separate from each other. The motive for takeover is to increase shareholder wealth of acquirer company. In case of merger there may be strong probability to face losses and consequently decrease in wealth of shareholders, but in case of takeover if company feels that the results of target company is not to be good enough in future and could not increase in wealth, then takeover company can sell its share in the market and could invest in some other healthy company. The literature categorized takeover in two ways first is friendly takeover and second hostile takeover, but mostly takeover neither friendly nor hostile they mostly follow managerial theory to satisfy managers' interest or prestige.

The above stated motivations of deal would make the firm 'better off' and that would be in the interest of their shareholders. The behavioral motivations have a concern with managers. It is important to note that manager may also be motivated to purchase a firm for their own self-interest or to increase the value of stakeholders, the so called 'agency problem'. Jensen and Ruback (1983) also conclude that the gains do not come from extra market power of the enlarged company, but from other factors called as improved management. These behavioral theories are used to explain 'stock market bubbles', period of high valuations. The general accepted notion that managers act in the best interest of their shareholders- questioning the quality of high valuations. Roll (1986) argued that companies go for

acquisition to obtain their 'hubris' satisfaction. In the hubris approach managers of the company pay high bid if the expectation of returns are high. The fact is that if there is more than one bidder, the management team with the most unreasonable high forecasts will outbid and win the contest- 'the winner's curse'.

Despite of above, technological change, such as inventions in communications, would tend to lessen the costs of internal production (Coase 1992) and would induce to expansion of firm size. M&A are helpful to realize the technological benefit. Deregulations of economy have related effects on optimal firm size and influence the company to go for M&A to expand it globally (Janson 1993). He pointed to the OPEC oil embargo of 1973 as an important impetus for subsequent mergers in the future. Cross-border mergers and merger within the economy may have one more objective for example tax saving and benefits of similar logistic system. Small and medium size companies, most of time, tend to follow stock-market movement and along with that movement these came under a choice of M&A. It happens whenever there is boom in the stock-market, most of time, mergers and acquisitions takes place in that time (Golbe and White, 1988). They confirmed that mergers are pro-cyclical. The market represents the respective firm's value. To increase market value, of course, firm have two alternatives i.e., internal or external strategies when the replacement cost of internal expansion become cause of decrease in market value, then M&A takes place. M&A works like fusion of two companies which results in outlay positive energy i.e., profitability or increased market value of securities. Javanovic and Rousseau (2002) found that mergers waves are preceded by a rise in the dispersion of Tobin's Q defined as the ratio of market value to replacement cost. The ability to execute successfully M&A's strategy is critically important as the setting of objective. The common measure of success is increased the firm's value from the realization of identifies M&A synergies through the successful integration with the acquired organization. Although integration is not without stress for an organization and its stakeholders, M&A can succeed if companies develop and adhere to a highly disciplined strategy of 'adding value' from day one, while implementing a blueprint for future growth. M&A, because, is a sporadic event and there is very little scope for companies to learn from their past experiences, so it becomes more essential for the companies to focus on pre and post M&A strategy. Pre

M&A strategies start from the need of M&A and end-up with transactional integration. But post deal strategy will attribute to post functioning of company after settlement of M&A. Despite of the fact that mergers and acquisitions are two distinct strategies of corporate restructurings but in the present research both are considered as same. In the Indian business environment, there are three types of acquisitions take place, first, acquisition for consolidation, second acquisition for control and third substantial acquisition. The acquisition for consolidation has the same motive as merger but essentially it is not merger in full, however with the passage of time these companies merge with each other at last. Acquisition for control is much famous and executed by companies and financial growth-lead strategy. Under this acquisition company purchase that much of shares in the target company which could be necessary to show its power or to lead the target company according to acquirer company's inclination. The substantial acquisition has only legal apprehension that if acquirer company exceeds the specified limit to acquire share in target company then it has to follow some provisions and rules of SEBI like takeover code, disclosure policy of takeover etc.

## 2. DATA COLLECTION AND STATISTICAL TOOLS USED FOR ANALYSIS

In the present study the post acquisition performance of a sample of 60 companies have been examined on the basis of changes in their market price of share. The data on the post-acquisition performance is collected from the Bombay Stock Exchange (BSE) website for sample companies. The data on change in the stock-market index that is BSE-SENSEX has also been collected through the BSE website. It is imperative to disclose here that only companies listed on BSE have been considered under the analysis of present research. The data on the above said two variables have been collected over the period of eight years starting from 2001-02 to 2008-09. It means the takeover has taken place in year 2000-01 are considered under the present study. The post-acquisition performance of the companies has treated as dependent variable and the change in stock-market SENSEX has been considered as independent variable.

As discussed above the share price of the company might be influenced either due to stock-market behavior or by companies performance in previous years. To assess the impact of stock-market influence on companies' market price of share 'linear regression model' has been used, where

companies' market price of share is considered as endogenous variable and behavior of stock-market as exogenous variable. As the companies own performance also contribute/ retard market-price of the share, to examine companies own influence on the market price of share 'Durbin-Watson' test has been exercised. The relevant statistical formulas are as given below:

### Linear Regression Model:

$$Y_i = b_0 + b_1 X_{i1} + \dots + b_p X_{ip} + e_i$$

$$: \quad : \quad : \quad : \quad : \quad :$$

$$Y_t = b_0 + b_t X_{it} + \dots + b_{tp} X_{tp} + e_t$$

$y_i$  is the value of the  $i$ th case of the dependent variables.

$p$  is the number of predictors, as the data collected on monthly based performance so there are twelve predictors representing different twelve months.

$b_j$  is the value of the  $j$ th coefficient 'j' ranges from '0' to 'p'.

$X_{ij}$  is the value of the  $i$ th case of the  $i$ th predictors

$e_i$  is the standard error in the observed value for the  $i$ th case.

$b_0$  is the intercept.

It is imperative to discuss here that the above said regression equation is run with the help of SPSS.16 version for each year starting from 2001-02 to 2008-09. All the  $i$ th case in the equation represents to different year performance of the market price of share of sample companies as dependent variable and regressed by stock-market ( $X$ ) independent variable.

### Durbin-Watson Test:

The most celebrated test for detecting serial correlation is that developed by Durbin and Watson, popularly known as Durbin-Watson which is simply the ratio of sum of squared differences in successive residuals to the RSS (residual sum squared). It is important to discuss here that the numerator of the  $d$  statistic the number of observations is  $n-1$  because one observation is lost in taking successive differences. As per general practice the value of ' $d$ ' approximately to 2 is considered as the best of correlation of preceding and successive variables and fix the strong dependency on previous performance of the companies' share price on the future market price of the share.

## 3. EMPIRICAL ANALYSIS

To make analysis of stated hypotheses that performance of companies has influence of stock-market behavior in post acquisition period and the share price of the company is mainly depend upon the volatility of stock-market instead of

companies' own profitability and potential. The f-statistics, here, determines the dependency of market share price of the companies on stock-market and explain the prudency of the model as well. The beta value shows the regression coefficient.

The 'Durbin-Watson' test shows the autoregressive results of the company those regressed by the past performances of the company. The detail discussion is given in the following Table I as listed below.

**Table 1: Market Price of Share in Post-Acquisition Period and Influence of Stock-Market**

Year	R	R-Squared	Standard Error (estimate)	F-statistic	$\beta$ -value (beta) and t-value	Durbin Watson
2001-02	0.128	0.16	42.131	10.757 (0.001)	0.29 [3.279]	1.784
2002-03	0.12	0.07	66.93	0.093 (0.760)*	0.005 [0.305]*	1.910
2003-04	0.16	0.04	56.49	0.158 (0.691)*	0.015 [0.397]*	1.947
2004-05	0.002	0.03	49.39	0.004 (0.952)*	0.003 [0.060]*	2.095
2005-06	0.023	0.01	42.56	0.330 (0.566)*	-0.020 [-5.74]*	2.583
2006-07	0.90	0.08	21.23	5.251 (0.022)	0.25 [2.292]	1.978
2007-08	0.039	0.002	188.57	0.980 (0.323)*	-0.017 [-0.990]*	2.502
2008-09	0.112	0.010	109.07	5.790 (0.017)	0.008 [2.406]	2.002

Values in ( ) represents the p-values of f-statistics.

Values in [ ] represents the t-statistics values for beta

\*Values are significant at level 0.05

Source: Author Owned

Table 1 explains the year wise post acquisition performance related statistics. In year 2001-02 the value of 'R' and 'R-squared' is 0.128 and 0.16 respectively. The value of standard error is 42.131. The f-statistic is 10.757 and p-value corresponding to that is 0.001. The beta value and t-statistic are 0.29 and 3.379 respectively. The value of durbin-watson test is 1.784. In the year 2001-02 the minimum value of 'R' and 'R-squared' are least which states the robustness of the model. The insignificant values of f-statistics and t-statistics for beta suggested to accept the null hypothesis that companies market price of the share is not depended on stock-market. The value of durbin-watson test is closer to 2

and suggesting that the companies' performance is the main influence of market price of the share of respective company.

In the year 2002-03 the values of 'R' and 'R-squared' are least as 0.12 and 0.07. The f-statistic is 0.093 and it is significant at level 0.05. The value of beta and t-statistics are 0.005 and 0.305 which is significant at level 0.05. The significant value of f-statistics and t-statistics show that the market price of the shares is influenced by the stock-market. At the same time the value of durbin-watson test is 1.910 that is close to 2 which show that companies past performance also regressed the present market price of the share of the company. In the year 2003-04, 2004-05 and 2005-06 the values of 'R' and 'R-squared' are least and shows the strength of the model. The value of f-statistics and t-statistics are significant at level 0.05 and suggesting to accept the null hypothesis which stated there is dependency of

market price of the share of companies on stock market. Beside the stock-market dependency the values of durbin-watson also are near to 2 which shows the past performance regression over the present results.

The values of f-statistics and t-statistics are not significant in the year 2006-07 and 2008-09. However these are significant at level 0.01 only. The value of durbin-watson acclaims the dependency of present results on past performance of the companies. From the above discussion it is observed that the f-statistics and t-statistics are significant in all of year except 2001-02. However these are significant at level 0.01 in the year 2006-07 and 2008-09. The values of durbin-watson test are also noteworthy as these are closer to '2' and shows the high dependency of present results on past performance s of the companies.

It is examined from the above discussion that present performance of the companies is significantly regressed by past performance as the value of durbin-watson test is around 2 in every year. It is also observed that the value of durbin-watson test is more than 2 in year 2004-05, 2005-06, 2007-08 and 2008-09. Beside the importance of companies own performance the behavior of stock-market also influenced the company's performance as the value of f-statistics is significant in most of cases. It is investigated that the stock-market behavior and companies own performance, both has influenced the companies post-acquisition performance.

#### 4. CONCLUSION

Measuring post acquisition performance in terms of synergy realization is an attempt to bring the dependent variable of interest closer to the objective of the study. The financial success of the M&A could not be postulated as only single object of synergy or value creation. Synergy creation is a wider term encompasses human resources involved in the organization, production optimization, cultural assimilation, and organization integration along with financial success.

The motives of mergers and acquisitions are derived by timing and type of M&A and resultant into success or failure of the deal. This requires careful timing of bids, and element of stage management of share prices. These considerations play an important role in the subsequent strategies of the merged firm. The merged or acquirer company should conceive the policies to increase the value of shareholder for example continuing maneuvering for position in the stock

market rather to achieve short-run results or increased profitability through pooling of resources. The takeover on different timing with objective of bunching of hastily contrived, requires post-acquisition 'rationalization' measures. Beside the financial consideration the other important aspects are important like organizational structure and culture need to be considered while formulating post-acquisition policies. Successive and continuous M&A may add the complexity and become a problem to organizational stability consisting employees relations, communication and customer retention in post deal.

#### REFERENCES:

- Lorange, Peter. (1993), strategic planning and control: issues in the strategy process, BlackWell business publishers, pp. 134-35.
- Manne, Henry G. (1965), Mergers and the Market for Corporate Control, *'Journal of Political Economy'* vol. 73, pp. 110-20.
- Mueller, Dennis. (1969), A Theory of Conglomerate Merger, *Quarterly Journal of Economics*, Vol. 83, pp. 643-59.
- Jensen, M. C and Ruback, R.S. (1983) 'The Market for Corporate Control: The Scientific Evidence', *Journal of Financial Economics*, vol.11 nos. 1-4 (April), pp 5-51.
- Roll, R. (1986) 'The Hubris Hypothesis of Corporate Takeovers', *Journal of Business*, vol.59, no.2 part 1 (April), pp. 197-216.
- Coase, R.H. (1992) "The Institutional Structure of Production", *American Economic Review*. Vol.32, September, pp.713-719.
- Jensen, Michal.C (1993), "The Modern Industrial Revolution-Exit and the Failure of Internal Control System", *Journal of Finance*. July. pp. 831-80.
- Globe. Eevral, White, Lawrence. J. "A Time Series Analysis of M&As", *The Corporate Takeovers*, The University of Chicago Press. pp.265-309.
- Javanovic.B, and Peter.L.R (2002), "The Q-Theory of Mergers", *'American Economic Review'*. Vol.92 May 198-204.
- Kaur. Gurminder (2005). "Corporate Mergers & Acquisitions", *'Deep &Deep Publication'*. New Delhi. pp. 289-290.
- J. Durbin and G.S. Watson (1951), "Testing for Serial Correlation in Least Squares Regression," *Biometrika*, Vol. 38, pp. 159-71