

# Shareholder Value In The Third Wave Of Acquisitions

Michael Hergert, (E-mail: Michael.Hergert@SDSU.edu), San Diego State University

## Abstract

*Acquisition activity in the United States has occurred in three distinct waves. During the 1960s, acquisitions were predominantly made in areas unrelated to the acquiring firms. Later analysis of this conglomerate boom generally indicated that little or no shareholder value was created in this process. A second wave of acquisition and divestiture activity in the 1980s was characterized by the unwinding of the conglomerates and a search for synergy between the buyer and the acquired firm. The evidence on value creation for this period is somewhat more encouraging, although most studies indicate that firms did not succeed in creating profits through acquisitions. A third wave of acquisitions occurred in the late 1990s. This was an unprecedented era of merger and acquisition activity. Nearly \$4 trillion worth of mergers occurred from 1998-2000. This represents a volume of activity greater than the previous 30 years put together. This study examines the returns to acquiring firms during this period and compares them to previous studies of acquisition performance. Was it different this time? This study indicates that shareholder value was generally reduced in making acquisitions, although some factors can mitigate the degree of poor performance. On average, acquiring firms lost 4-7% from making acquisitions. There is evidence to support the conventional wisdom that firms often overpay making acquisitions and that the size of the stock premium can be tied to firm performance. However, after controlling for the price premium, there is significant evidence of wealth creation (synergy) from the transaction.*

## 1. Introduction

*A*n historic boom in merger and acquisition activity occurred in the 1990's. Nearly \$4 trillion worth of mergers occurred during the three-year period of 1998-2000. This represents a volume of activity greater than the previous 30 years put together. The 1990's included several of the largest deals of all time, including the \$166 billion purchase of Time Warner by AOL in January, 2000. These deals were part of the third major wave of acquisitions in this century. During the 1960s, acquisitions were predominantly made in areas unrelated to the acquiring firms. Later analysis of this conglomerate boom generally indicated that little or no shareholder value was created in this process. A second wave of acquisition and divestiture activity in the 1980s was characterized by the unwinding of the conglomerates and a search for synergy between the buyer and the acquired firm. Studies of this period show somewhat more promising results for value creation, although the evidence is mixed. It appeared that most of the gains from these transactions were captured by the shareholders of the acquired firms. The latest wave of mergers and acquisitions can be characterized as very large deals that were fueled by a healthy stock market and low interest rates. The availability of easy money made it possible to acquire firms of virtually any size. This study examines the returns to acquiring firms during this period and compares them to previous studies of acquisition performance.

The strategy of creating value through mergers and acquisitions has many skeptics. A long series of studies of acquisition performance has cast doubt on the performance of acquisitions (Jensen, 1988). In approximately two thirds of all deals, the stock price of the acquiring firm falls immediately after the announcement is made (Rappaport and Sirower, 1999). This had led many researchers to conclude that acquiring firms are unlikely to create sufficient synergy in the transaction to compensate for the large stock premium that is generally required (Porter, 1987). As a result, it appears that most of the gains from an acquisition flow to the shareholders of the acquired firms. There is

evidence that firms with greater experience at acquisitions tend to do somewhat better (Lubatkin, 1983) and that acquisitions in related industries are more likely to create synergy and positive returns to the acquiring firm (Haleblian and Finkelstein, 1999). Other factors which influence value creation include acquisition target size (Asquith, Bruner, and Mullins, 1983), deal structure (Travlos, 1987; Datta, Narayanan, and Pinches, 1992), tax law considerations (Wansly, Lane, and Yang, 1983), organizational learning (Hayward, 2002), acquirer slack (Hitt, 1993), and degree of consensus about the deal (Mallette and Fowler, 1992; Ross, Westerfield and Jordan, 1993; Brickley, Coles and Terry, 1994). Although there is considerable diversity in the methodology and hypotheses of previous studies, the predominant finding is that acquisition activity often leads to a wealth transfer from the buying firm to the shareholders of the acquired firm. This conclusion raises fundamental doubt about the attractiveness of acquisitions as a strategic tool. This study analyzes the performance of large acquisitions during the period 1995-2000 to see if earlier conclusions about the effectiveness of acquisition strategies still seem valid.

## 2. Hypotheses And Methodology

This study is based on a sample of 302 mergers and acquisitions that occurred from 1995-2000. The volume of activity during this period was six times greater than any five year period in history. The average deal was also quite large. For this sample, the average transaction was over \$7 billion. During previous periods of history, an acquisition of this size would have been considered enormous. Most of the deals could be characterized as related acquisitions. Over 50% of the transactions occurred within the same 4 digit SIC code.

Acquisition performance was calculated using the abnormal returns methodology commonly used in event studies. This form of analysis assumes that markets are informationally efficient and that the stock price reaction to an announced acquisition will quickly reflect all known information about the likely success. Elton and Gruber (1987) review over 100 studies using this approach and conclude that price adjustments occur rapidly and efficiently. In this study, abnormal returns were calculated as:

$$R_{it} = a_j + \beta_i R_{mt}$$

The returns on stock (i) in period (t) will be equal to a constant ( $a_j$ ) plus the return on a market portfolio ( $R_{mt}$ ) times the beta (a measure of nondiversifiable risk) of stock (i). The abnormal returns were calculated for a window extending from one week immediately preceding to one week after the acquisition announcement. Earlier studies have concluded that stock price adjustments occur very rapidly following acquisition announcements, generally within one day (Haleblian and Finkelstein, 1999).

The overall performance of the acquisitions in this study is consistent with earlier research. On average, acquiring firms lost 4.2% of their value following the acquisition announcement. The results are much more encouraging for the shareholders of the acquired firms. On average, they realized a gain of 19.3%. The earlier pattern of wealth transfer in acquisitions appears to hold true for the wave of very large transactions that occurred from 1995-2000. This study also analyzed the determinants of acquisition performance. In particular, the study investigated the role of the stock price premium, business relatedness, deal size, and seller returns in determining the performance of acquiring firms.

The conventional wisdom regarding acquisitions is that they frequently fail because buyers pay too much (Business Week, 2002). The purchase price almost always includes a substantial premium over the existing valuation of target firms. If markets are efficient, this extra cost must be recouped in the form of synergy or other type of value creation that must occur after the deal is consummated. Earlier work by Jemison and Sitkin (1986) suggests that the escalating momentum of making a deal may lead to higher bids than can be justified by the characteristics of the target firm. For the firms in this sample, the average stock price premium was 19%. This creates a substantial burden for the acquiring firm to overcome. The negative reaction by the market to acquisition announcements is evidence that firms are not expected to be able to achieve this feat. This leads to the hypothesis that:

*H<sub>1</sub>: Buyer returns will be negatively correlated with size of acquisition premium.*

The size of the transaction can also affect acquisition performance. Earlier studies have found that large acquisitions in related industries can produce positive returns through the mechanism of increasing the market share of the acquiring firm (Chichester, 1996). However, a countervailing effect may be the difficulties of integrating a large acquisition into the operations of an existing firm. Other studies have indicated that the post-acquisition hurdles to combining operations can negate the potential synergies (De Noble, Gustafson and Hergert, 1988). The impact of size is particularly interesting for this sample given the extremely large average deal size. This study addressed this issue by testing the hypothesis:

*H<sub>2</sub>: Buyer returns will be positively correlated with transaction size.*

The business relatedness of the target firm to the acquiring firm can be an important determinant of performance. Previous studies have generally found that acquisitions in related industries are more likely to succeed due to the greater prospects for operational synergy (Chichester, 1996). The conglomerate acquisitions of the 1960s have been largely discredited as failing to create shareholder value. The sample used in this study contains a mixture of related and unrelated acquisitions. Approximately 56% of the acquisitions in the sample occurred in the same 4 digit SIC code and were classified as related acquisitions. This study will test the hypothesis that:

*H<sub>3</sub>: Buyer returns will be higher for related acquisitions.*

This study also examined the relationship of seller returns to buyer returns. An acquisition need not lead to a wealth transfer from one group of shareholders to another. A successful acquisition can be a positive sum transaction that creates value for both parties. The terms of the deal (in particular the price premium) may determine which group captures the majority of the benefits. However, it is useful to distinguish between the value created in the acquisition and the distribution of the benefits. In order to do this, this study examined the relationship between seller and buyer returns. After controlling for purchase price, there could be a positive relationship (value creation) between buyer and seller returns if the deal produces greater competitive strength and synergy. The presence of a positive relationship does not mean that the shareholders of the acquiring firm will necessarily benefit from the deal. That will depend on the price paid and the effectiveness of realizing potential synergies. The test hypothesis is:

*H<sub>4</sub>: Buyer returns will be positively correlated with seller returns.*

### 3. Findings

The determinants of acquisition performance were analyzed using least squares regression. The dependent variable was buyer abnormal returns for the period from one week prior to the acquisition announcement to one week after (BUYER). The independent variables were seller abnormal returns (SELLER), stock price premium (PREMIUM), size of transaction (SIZE), and business relatedness (RELATE). Size of transaction was measured as the dollar price paid for the target firm. Business relatedness was a binary variable that was assigned a value of 1 if both firms were in the same 4 digit SIC code industry and 0 if not. The results are shown below in Table 1.

Table 1

Model 1	Constant	Seller	Premium	Size	Relate	R <sup>2</sup>
BUYER	-.0715 (2.39)*	.173 (2.24)*	-.0013 (2.07)*	.0000031 (.27)	.055 (2.01)*	.223
<b>Model 2</b>						
BUYER	-.073 (2.54)*	.174 (2.27)*	-.0013 (2.07)*		.054 (2.00)*	.215

Note: t statistics in parentheses  
\* indicates significance at 95%

The statistics in Table 1 are generally in support of the hypotheses described previously. As found in earlier studies, it appears that buyer returns are higher when both firms are in the same industry. This supports the notion that operating synergies and competitive strength can be enhanced through horizontal integration. It is also clear that buyer returns are reduced by higher stock price premiums. This supports the conventional wisdom that firms can undermine the potential effectiveness of an acquisition by paying too much. However, it appears that the wealth transfers in this sample were limited to the stock price premium. After controlling for the premium, it appears that seller returns are positively correlated with buyer returns. This suggests that the transactions did create shareholder value. Finally, there was no evidence of a size effect. The SIZE variable was uncorrelated with buyer returns. It is possible that the countervailing effects described earlier were both present and canceled each other out. In light of the enormous average size of the transactions in this sample, it is interesting that these megamergers did not result in a significant impact one way or the other.

The pace of acquisition activity has slowed considerably since the year 2000. The capital market conditions that fueled this boom have changed dramatically. For the foreseeable future, many of the organizations that participated in these deals will face significant challenges in restructuring their operations to make sense of the radical changes that these transactions created. The empirical evidence from this study is quite consistent with finding from the previous waves of acquisitions and does not provide much optimism for the likely success of these deals. Only time will tell whether or not this latest wave of activity will ultimately prove profitable for the firms that participated.

#### **4. References**

1. Asquith, P., Bruner, R., and D. Mullins, "The gains to bidding firms from merger", *Journal of Financial Economics*, 1983, 11: 121-139.
2. Brickley, J., J. Coles, and R. Terry, "Outside directors and adoption of poison pills", *Journal of Financial Economics*, 1994, 35: 371-90.
3. *Business Week*, "Mergers: Why most deals don't pay off", October 14, 2002.
4. Datta, D., Narayanan, V. K., and G. Pinches, "Factors influencing wealth creation from mergers and acquisition: a meta-analysis", *Strategic Management Journal*, 1992, 13: 67-84.
5. Elton, E. and M. Gruber, *Modern Portfolio Theory and Investment Analysis*, New York: Wiley, 1987.
6. Halebian, J. and S. Finkelstein, "The influence of organizational acquisition experience on acquisition performance: A behavioral perspective", *Administrative Science Quarterly*, March, 1999.
7. Hayward, M., "When do firms learn from their acquisition experience?", *Strategic Management Journal*, January, 2002.
8. Hitt, M., Harrison, J., Ireland, D., "Lifting the veil of success in mergers and acquisitions", paper presented at the Annual Meeting of the Strategic Management Society, 1993.
9. Jemison, D. and S. Sitkin, "Corporate acquisitions: A process perspective", *Academy of Management Review*, 1986, 11(1): 145-163.
10. Jensen, M., "Takeovers: Their Causes and Consequences", *Journal of Economic Perspectives*, 1(2), 1988, 21-48.
11. Lubatkin, M., and S. Chatterjee, "Mergers and the performance of the acquiring firm", *Academy of Management Review*, 1983, 8: 218-235.
12. Mallette, P. and K. Fowler, "Effects of board composition and stock ownership on the adoption of poison pills", *Academy of Management Journal*, 1992, 35: 1010-1035.
13. Porter, M., Puffer, S. and J. Weintrop, "From competitive advantage to corporate strategy", *Harvard Business Review*, 1987, 65: 43-60.
14. Rappaport, A. and M. L. Sirower, "Stock or Cash?", *Harvard Business Review*, 77(6), 1999, 147-58.
15. Ross, S., R. Westerfield, and B. Jordan, *Fundamentals of Corporate Finance*, 1993, Boston, Irwin.
16. Wansley, J., Lane, W., and H. Yang, "Abnormal returns to acquired firms by type of acquisition and method of payment", *Financial Management*, 1983, 12: 16-22.