

Acquisitions in the Lodging Industry

Good News for Buyers and Sellers

Takeovers in the lodging industry generally have resulted in gains for both the acquired and the acquirers—unlike many other industries.

BY LINDA CANINA

In the last two decades of the twentieth century the lodging industry experienced an unprecedented level of consolidation. In particular, mergers and acquisitions among lodging companies took place at record levels in the late 1990s. From 1982 through 2000 the industry saw a total of 57 acquisitions with an aggregate market value in the target companies' stocks of over \$53 billion dollars. Exhibit 1 (overleaf) reports the annual number and annual market value of target stocks for all lodging acquisitions completed during that 1982–2000 period. The sample, supplied by Securities Data Corporation (SDC), includes mergers of both public and private companies in which at least one of the companies involved operates in the lodging industry.¹ A noticeable trend

in the data is that the value of lodging mergers increased dramatically since 1993. In 1993 the industry saw two mergers valued at \$29.7 million, while in 1998 a total of 11 mergers were valued at \$25 billion. That is, the value of acquisitions in the lodging industry was almost 1,000 times greater in 1998 than in 1993.

The fervor of consolidation has been based on a belief that gains can accrue to the merged entity through expense reductions, increased market power, reduced earnings volatility, and economies of scale and scope. The critical question, then, is whether lodging mergers actually achieve the expected performance gains. If consolidation truly leads to performance gains, then shareholder wealth can be increased. However, if consolidating merged entities is so difficult that the expected gains do not accrue, then mergers may lead to a less-profitable and less-valuable lodging industry.

¹Note that the sample used for Exhibit 1, supplied by Securities Data Corporation, is larger than the sample used in this study because the size of the data sample used in this study was limited by the need for daily stock-price data.

EXHIBIT 1

Public and private lodging-industry acquisitions, 1982–2000

Year	Number	Aggregate value
1982	1	\$152.4
1983	2	423.7
1984	2	316.0
1985	3	460.3
1986	2	1,065.0
1987	0	0
1988	4	50.7
1989	1	55.5
1990	1	48.4
1991	0	0
1992	1	4.8
1993	2	29.7
1994	5	280.1
1995	5	196.4
1996	4	4,936.0
1997	7	15,559.6
1998	11	25,013.1
1999	5	4,827.0
2000	1	428.3
Total	57	\$53,847.0

Note: Value figures are in millions of U.S. nominal dollars.

Mergers result in overall benefits when the consolidated entity is more valuable than the aggregate of the two predecessors. Such an increase in value may be achieved in any of several ways. If the management of the acquiring institution is superior to that of the target firm, then higher levels of performance may be attained through improved management. Benefits may also be achieved when a more-efficient institution is created through the elimination of redundant facilities and personnel or through offering a more-profitable mix of products and services. Finally, increased market power may raise performance.

Despite theoretically favorable prospects, merger gains may be difficult to achieve in practice. Consolidating two large, formerly independent organizations into one firm can be a costly and difficult process. The effort required to merge may be so substantial that any benefits to consolidation may be lost. This problem is especially severe if managers overestimate their ability to manage newly acquired assets. Moreover, in light of the large number of mergers that took place in the industry, managers may be more willing to pursue imprudent acquisitions just to keep pace with competitors or to avoid being acquired themselves.

On average, fewer than half of mergers across all industries have created value. *The Economist*, for instance, offered the following dim view of mergers: “Study after study of past merger waves has shown that two of every three deals have not worked; the only winners are the shareholders of the acquired firm, who sell their company for more than it is really worth.”² By and large, the merger literature concludes that consolidation generally does not lead to significant performance gains or overall shareholder wealth creation. One notable study reached a different conclusion. Cornett and Tehranian not only found merger-related gains (on average) among their sample of 30 mergers involving publicly traded banking institutions, but also concluded that weighted abnormal returns around the merger announcement are positive.³

The purpose of this paper is to analyze the financial reality of mergers in the lodging industry and to determine whether the financial market views consolidation as value enhancing in the lodging industry. The results are useful for those managers considering acquisitions as against other forms of growth. The approach taken involves evaluating the stock market’s reaction to merger announcements. This analysis is performed for both acquirers and targets and for mergers and tender offers separately.⁴

² “How to Make Mergers Work,” *The Economist*, January 9, 1999, pp. 21–23.

³ Cornett and Tehranian, “Changes in Corporate Performance Associated with Bank Acquisitions,” *Journal of Financial Economics*, Vol. 31 (April 1992), pp. 211–234.

⁴ A tender offer is a publicly announced offer to buy shares at a fixed price from anyone who “tenders” their shares.

While many studies use this equity-based approach to examine the abnormal returns of both acquirers and targets for the overall capital market, only one has analyzed the abnormal returns in the lodging industry. Kwansa analyzed the stock-price reaction to merger announcements for a sample of target firms in the lodging sector between 1980 and 1990.⁵ My study adds to this area of research by extending the sample data through 1999, by including the portfolio of acquiring firms in addition to the target firms, and by analyzing mergers and tender offers separately. I analyzed mergers and tender offers separately for two reasons. First, the theoretical models imply possible differences in the results. Second, the price behavior of bidders in mergers and tender offers remains a controversial issue in finance.⁶

The remainder of this paper is organized as follows. First, it reviews the existing empirical evidence. Second, it describes the data sample and presents the methodology. Third, it reports the results of my statistical tests.

Empirical Evidence

Many researchers have addressed the question of anticipated wealth gains from acquisitions for the overall capital market. The evidence indicates that the stockholders of target firms are clear winners in takeovers, because they earn excess returns around the announcement of the acquisitions. Jensen and Ruback, for instance, reviewed 13 studies that look at abnormal returns around merger announcements and reported an average excess return of 30 percent to target stockholders in successful tender offers and 20 percent to target stockholders in successful mergers.⁷ After reviewing the results of 663 tender offers made between 1962 and 1985, Jarrell, Brickley, and

⁵F.A. Kwansa, "Acquisitions, Shareholder Wealth and the Lodging Sector: 1980–1990," *International Journal of Contemporary Hospitality Management*, Vol. 6 (1994), pp. 16–20.

⁶For a discussion of the theoretical models, see: M. Bradley, "Interfirm Tender Offers and the Market for Corporate Control," *Journal of Business*, Vol. 53, No. 4, October 1980, pp. 345–376.

⁷M.C. Jensen and R.S. Ruback, "The Market for Corporate Control: The Scientific Evidence," *Journal of Financial Economics*, Vol. 11, April 1983, pp. 5–50.

Methodology

The following is a brief description of the standard event-study methodology that I used to compute the excess returns and t -statistics for the portfolio of acquiring and target firms during the announcement period. Daily closing prices of the stock for each company were obtained from the CRSP Daily File. The sample period, for each company, is defined as 111 days before the announcement date through one day after the announcement date. The daily returns were computed as the log price relatives adjusted for dividends.—L.C.

First, the expected return was computed during the estimation period by event i , by company j

$$\bar{R}_{ji} = \frac{\sum_{t=-111}^{-12} R_{j it}}{N_{ji}}$$

where:

t is the t 'th day relative to a given announcement date i for firm j ,

$R_{j it}$ is the log price relative for firm j , event i , day t , and

N_{ji} is the number of trading days in the estimation period for event i , company j .

The unexpected or excess return is calculated for each day, t , in the event period, by event i , by company j . Excess return is defined as the actual daily return minus the expected return, calculated thus:

$$\hat{e}_{jit} = R_{j it} - \bar{R}_{ji}$$

where t denotes the t 'th day relative to a given announcement date i for firm j . The excess returns are averaged across events for the acquiring and target companies separately to compute the unexpected return for the acquiring–target portfolio of firms for each day, t , in the event period, as follows:

$$\bar{e}_t = \frac{\sum_{j=1}^J \sum_{i=1}^{I_j} \hat{e}_{jit}}{\sum_{j=1}^J I_j}$$

where I_j represents the number of announcements of mergers for company j .

To test the statistical significance of the daily excess returns by event and the daily excess returns for the acquiring and target portfolios, t statistics were calculated, in the following manner: (1) Calculate the t -statistic for the unexpected return, by event day, t , by announcement, i , by company, j :

$$t(\hat{e}_{jit}) = \frac{\hat{e}_{jit}}{se_{ji}}$$

where se_{ji} is the standard error of the unexpected returns calculated over the 100-day estimation period prior to the event period of each announcement i , by company, j .

(2) Calculate the t -statistic for the unexpected return on each portfolio, by event day, t :

$$t(\bar{e}_t) = \frac{\sum_{j=1}^J \sum_{i=1}^{I_j} t(\hat{e}_{jit})}{\sqrt{\sum_{j=1}^J I_j}}$$

Note: All statistics are computed assuming independence.

EXHIBIT 2

Public lodging-industry acquisitions, 1982–2000

Year	Number	Aggregate value
1982	1	\$152.4
1983	1	137.4
1984	2	316.0
1985	3	460.3
1986	2	1,065.0
1987	0	0
1988	2	39.1
1989	1	55.5
1990	0	0
1991	0	0
1992	1	4.8
1993	0	0
1994	2	80.2
1995	4	193.9
1996	3	4,934.5
1997	7	15,559.6
1998	10	25,011.7
1999	2	1,090.3
Total	41	49,100.7

Note: Value figures are in millions of U.S. nominal dollars.

Netter noted that the premiums thus attained ranged from 19 percent to 35 percent.⁸

The effect of takeover announcements on the bidding firm's stock prices is not as clear cut. Jensen and Ruback reported abnormal returns of 4 percent for bidding-firm stockholders around tender offers and no abnormal returns around mergers.⁹ Other studies indicate that approximately half of all bidding firms earn negative

⁸ Gregg A. Jarrell, James A. Brickley, and Jeffrey Netter "The Market for Corporate Control: The Empirical Evidence since 1980," *Journal of Economic Perspectives*, Vol. 2, No. 1 (1988), pp. 49–68.

⁹ Jensen and Ruback, pp. 5–50.

abnormal returns around the announcement of takeovers. Thus, shareholders may be skeptical about the perceived value of the takeover in many cases.¹⁰

Cornett and Tehranian examined the abnormal returns for 15 large interstate and 15 large intrastate bank acquisitions completed between 1982 and 1987 on the day before an acquisition was announced and the day of the actual announcement.¹¹ They found the weighted average of the abnormal returns of the acquirer and the target to be 2.09 percent (significant at the 0.05 level). This result is consistent with the finding in other bank-merger studies.¹²

Kwansa's analysis of the stock-price reaction to merger announcements comprised a sample of 18 target lodging firms during the first great wave of acquisitions in the 1980s. The results showed significantly positive cumulative excess returns of 31.5 percent during the period of 30 days before to 30 days after the announcement day.¹³

The Sample and Methodology

My data sample was formed by a two-stage process. First, I searched the Center for Research on

¹⁰ See: *Ibid.*; P. Dodd and R. Ruback, "Tender Offers and Stockholder Returns," *Journal of Financial Economics*, Vol. 5 (1977), pp. 351–373; D. Kummer and R. Hoffmeister, "Valuation Consequences of Cash Tender Offers," *Journal of Finance*, Vol. 33, May 1978, pp. 505–516; P. Dodd, "Merger Proposals, Management Discretion, and Stockholder Wealth," *Journal of Financial Economics*, Vol. 8, June 1980, pp. 105–138; P. Asquith, "Merger Bids, Uncertainty, and Stockholder Returns," *Journal of Financial Economics*, Vol. 11, April 1983, pp. 51–84; M. Bradley, A. Desai, and E.H. Kim, "The Rationale behind Interfirm Tender Offers: Information or Synergy?," *Journal of Financial Economics*, Vol. 11, April 1983, pp. 183–206; and P.H. Malatesta, "The Wealth Effect of Merger Activity and the Objective Functions of Merging Firms," *Journal of Financial Economics*, Vol. 11, April 1983, pp. 155–181.

¹¹ Cornett and Tehranian, pp. 211–234.

¹² See: M.M. Cornett and S. De, "Common Stock Returns in Corporate Takeover Bids: Evidence from Interstate Bank Mergers," *Journal of Banking and Finance*, Vol. 15, No. 2 (April 1991), pp. 273–295; F. de Cassio, J.W. Trifts, and K.P. Scanlon, "Bank Equity Returns: The Difference between Intrastate and Interstate Bank Mergers," working paper, University of South Carolina, Columbia, SC, 1988; and J.W. Trifts and K.P. Scanlon, "Interstate Bank Mergers: The Early Evidence," *Journal of Financial Research*, Vol. 10, December 1987, pp. 305–311.

¹³ Significant at $p < 0.01$ level; see Kwansa, *op. cit.*

Securities' Prices (CRSP) data files for all NYSE, AMEX, and NASDAQ firms delisted during 1981–1998.¹⁴ Second, I searched the Securities Data Company (SDC) database for all mergers from January 1999 through March 2000. CRSP identifies firms delisted by reason of acquisition with specific codes for delisting and for the last dividend payment. The delisting date is the effective date of acquisition. I checked the *Capital Adjustments Register* to identify the acquiring firm for each delisted firm and collected the announcement dates from the *Wall Street Journal Index*. The final sample comprises acquisitions that satisfy the following criteria: the acquirer and the target are U.S. companies listed on NYSE, ASE, or NASDAQ; both are included in the CRSP data base; no other significant events were announced or occurred 111 days before through one day after the announcement date; and the acquirer or the target firm is in the lodging industry.¹⁵ As summarized in Exhibit 2, the number and value of lodging acquisitions peaked in 1999 with an acquisition value over \$25 billion.

I obtained daily closing prices of the stock for each company involved in a merger from the CRSP Daily File. The sample period, for each company, is defined as 111 days before the announcement date through one day after the announcement date. The daily returns were computed as the log (logarithm) price relatives adjusted for dividends, that is, the natural log of the ratio of stock prices plus dividends at time t divided by the stock price at time $t-1$ (i.e., the day before). This is mathematically equivalent to computing the total daily return at time t as the stock price at time t plus the dividend at time t minus the stock price at time $t-1$, all divided by the stock price at time $t-1$.

The analysis of the effect of corporate acquisitions on stockholder returns is accomplished

by testing the statistical significance of the unexpected return of a portfolio of acquiring and target firms that announced mergers in the lodging industry using the event-study methodology.¹⁶ I computed the unexpected returns for the portfolios of acquiring and target firms for each day of the event period, using the mean model to estimate the expected return during the estimation period. The event period extends from two

The number and value of lodging acquisitions peaked in 1999 with an acquisition value over \$25 billion.

days before the announcement date through one day after that date. The estimation period consists of 100 trading days ending 10 days prior to the event period.

To test whether the financial markets view merger announcements as good news, I examined the unexpected return from two days before through the day after the merger announcement.¹⁷ The unexpected (i.e., abnormal) return is defined as the actual return minus the return expected by the market before the merger announcement. As such, the unexpected return represents the additional value associated with the merger announcement. If the unexpected return is positive and statistically significant, the implication is that the financial markets view the merger announcement as good news (presumably because the merger enhances the value of the firm). On the other hand, if the unexpected return is negative and statistically significant, one

¹⁴ NYSE = New York Stock Exchange, ASE = American Stock Exchange, and NASDAQ = National Association of Securities Dealers Automated Quotation System. In general, a firm that has been merged or acquired is no longer traded on an exchange. Another common reason for delisting is that a firm's stock price has fallen below a set minimum.

¹⁵ The lodging industry was defined by the 4-digit SIC code of 7011; the Lodging Real Estate Investment Trusts, by SIC codes of 6798 and 6799.

¹⁶ A brief description of the methodology is presented in the sidebar on page 49. For a detailed explanation, see: S. Brown and J. Warner, "Measuring Security-price Performance," *Journal of Financial Economics*, Vol. 8, Sept. 1980, pp. 205–258; and S. Brown and J. Warner, "Using Daily Stock Returns: The Case of Event Studies," *Journal of Financial Economics*, Vol. 14, March 1985, pp. 3–31.

¹⁷ Kwansa found that the unexpected returns for the targets were insignificantly different from zero on days –30 through –2 and beyond day +1.

EXHIBIT 3

Abnormal returns for acquiring and target lodging-industry firms

Part 1: All lodging-industry acquisitions (mergers and tender offers)

Day*	Acquirer		Target	
	Abnormal-return percentage	t-statistic	Abnormal-return percentage	t-statistic
-1	0.0547	0.1826	0.6599	0.3358
0	1.2820	3.1460	8.9089	26.4655
+1	-0.2328	-1.4283	1.3406	2.2975

Part 2: Mergers only

Day*	Acquirer		Target	
	Abnormal-return percentage	t-statistic	Abnormal-return percentage	t-statistic
-1	-0.2325	0.1725	1.8153	1.9150
0	0.9056	2.5559	5.5806	17.8217
+1	-0.3254	-1.5722	0.7201	1.8376

Part 3: Tender offers only

Day*	Acquirer		Target	
	Abnormal-return percentage	t-statistic	Abnormal-return percentage	t-statistic
-1	0.4950	0.1813	-3.2850	-2.2885
0	3.6140	3.5108	14.1200	25.1292
+1	-0.1420	-0.5471	3.7050	1.0758

*relative to announcement day.

could conclude that the stock market views the announcement as bad news that will result in a reduction of the combined firm's overall value. Last, if the unexpected return is insignificantly different from zero, then the merger announcement has no impact on the firm's value.

Happy Returns

The results, the excess return, and the *t*-statistic for the portfolio of acquiring firms and target firms for each day in the event period are presented in Exhibit 3. The first section presents the results for the entire sample of both mergers and tender offers. The second section shows the re-

sults for the sample of mergers alone, while the third panel exhibits the results for the sample of tender offers alone.

Merged and tendered. As shown in Part 1 of Exhibit 3, the unexpected return for the entire portfolio of target firms (whether by merger or tender offer) is significantly different from zero on the announcement day (i.e., day 0) and the following day (day 1).¹⁸ On the announcement day the unexpected return is 8.9089 percent, while the unexpected return is 1.3406 percent for the following day.¹⁹ Each is significant at the 1-percent level of significance. The extremely large abnormal returns make it quite clear that the shareholders of the target firm benefit upon the announcement of the merger.

For the acquiring firms, on the other hand, the unexpected return is much lower than for the targets and is significantly different from zero only on the announcement day itself. The unexpected return on the announcement day is 1.2820 percent for the acquiring firms (much less than the 8.9 percent for the target firms). The unexpected return for the portfolio of acquirers is insignificantly different from zero for both the days preceding and following the announcement.

Even though the gains are uneven, the results show that the shareholders of both the acquiring and target firms gain at the time of the merger announcement. The much-greater gains for the shareholders of the target firms are consistent with the empirical evidence found in the banking industry.

These results imply that the announcement of an acquisition reflects positive information about the firms involved, which in turn fosters a favorable stock-price response based on the expectations of a positive unexpected return. That positive price response may be due to stockholders' expectations regarding the effects of monopolistic market power, increased productive efficiency due to synergies, or increased efficiency due to the removal of inefficiencies. Each of these effects predicts that the combined firm will generate cash flows with a present value in excess of

¹⁸ The abnormal returns computed for days -11 through -3 were insignificantly different from zero.

¹⁹ The abnormal returns were insignificantly different from zero beyond day 1.

the sum of the market values of the acquiring and target firms.

The results found here are similar to those found generally for target firms but are different from the usual outcome for acquiring firms. Most studies that examine mergers' effect on shareholders agree that target-firm shareholders gain when the merger is announced, and this study's results are consistent with that observation. The existing evidence regarding the gains to acquiring shareholders is mixed, though. Some studies show that merger bids are, on balance, negative net-present-value investments for bidders. However, others report slightly positive, but statistically insignificant, abnormal returns—suggesting that merger bids are at best zero net-present-value investments.

My findings differ from both of those outcomes, since I found significantly positive unexpected returns for the portfolio of bidding firms on the merger-announcement day. In contrast to the results of most acquisitions, I found that the stockholders of both the acquiring firm and the target firm gained at the time of the merger announcement. It appears that in the lodging industry, then, mergers are positive net-present-value investments for bidders. As a result, one can conclude that, on average, lodging-industry mergers have been value-maximizing tactics.

In sum, the results suggest that mergers appear to be value enhancing in the lodging industry since both the target and acquiring portfolios earn positive excess returns. On balance, lodging firms' mergers have increased the value to the shareholders of the target firms, while at the same time most likely increasing the value of shareholders' stake in the acquiring firms.

The difference. The lodging industry's results may differ from those of the overall market because most of the mergers in the lodging industry involve companies with the same core business. It makes sense that mergers are more likely to succeed when companies buy businesses with which they are familiar. It is also true that the largest number of lodging-industry mergers have occurred in recent years. At the same time, senior managers have become substantial shareholders, ensuring that their interests are more closely aligned with those of other owners of the business. This may have discouraged deals that

are based more on egotism or wishful thinking than on hard analysis.

How Mergers Differ from Tender Offers

The empirical evidence for the overall market indicates that the value-creation effect of takeover attempts varies across takeover techniques. Outright acquisition via tender offer has generally resulted in higher abnormal returns than have mergers. The mode of acquisition may be related to the expected wealth gains resulting from enhanced operating efficiencies and more focused management. Mergers are usually friendly deals

Even though the gains are uneven, the results show that the shareholders of both the acquiring and target firms gain at the time of the merger announcement.

that enjoy the cooperation of incumbent managers. Tender offers are made directly to target shareholders, often to overcome resistance from incumbent managers. Moreover, tender offers indicate confidence in the acquirer's ability to realize efficiency gains from the acquisition. Martin and McConnell, for instance, document a large turnover of target managers during the two years following tender offers, which suggests that the acquirers in tender offers attempt to create wealth by removing inefficient and redundant managers.²⁰

Parts 2 and 3 of Exhibit 3 show results consistent with those of other researchers. Target firms experience statistically significant differences in abnormal stock-price changes on the announcement day—14.12 percent for tender offers and 5.5806 percent for mergers. Acquiring firms experience statistically significant abnormal returns of 3.6 percent in tender offers but only 0.9 per-

²⁰ K. Martin and J. McConnell, "Corporate Performance, Corporate Takeovers, and Management Turnover," *The Journal of Finance*, Vol. 51, June 1991, pp. 1227–1246.

cent in mergers. Thus, the wealth gains ensuing from lodging-industry tender offers are significantly greater than those of mergers. The reasons for this difference would make an interesting topic for further research.

Valuable Decisions

This study has shown that the stock market reacts favorably to merger announcements in the lodging industry for both acquiring and target firms. In addition, the reaction is significantly more favorable for tender offers than for mergers. This implies that acquisitions have been valuable decisions from the capital market's perspective. These results differ from those for the overall market in which shareholders of the target earn more positive returns than do those of the acquiring firm (in a tender offer), while stockholders in a merged firm generally see negative returns.²¹

²¹ See: Dodd and Ruback, pp. 351–373; Kummer and Hoffmeister, pp. 505–516; Dodd, pp. 105–138; Asquith, pp. 51–84; Bradley, Desai, and Kim, pp. 183–206; Jensen and Ruback, pp. 5–50; and Malatesta, pp. 155–181.

My study is quantitative only and provides no real indication of why the hospitality industry's outcomes vary with those of capital markets generally. I speculatively offer three explanations. First, because hotel firms are merging with each other, the costs and difficulty associated with the merger implementation may be lower than those in other industries. Second, improvements in the quality of management and the elimination of redundant facilities and personnel may be easier to achieve in the lodging industry than in other types of firms. Finally, increased market power may raise performance, either as a result of economies of scale or of scope, if the business can capture more revenue by offering a broader range of services to its customer base than previously. Moreover, cost reductions may be achieved through economies of scale (e.g., due to complementary resources or elimination of inefficiency) obtained after reaching a critical mass. These speculations can be resolved through an examination of whether operating cash flows have increased following a merger or acquisition. Such revenue growth would explain favorable stock-price reactions at the time a merger is announced. This is the topic of my current research. ■



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