

## CHAPTER 10

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**MERGERS AND RETURNS! THE ACQUISITIVE COMPANY****The Hare and the Tortoise Revisited**

Peter was an impatient man. His portfolio was full of solid stocks that grew slowly but steadily every year and delivered decent returns but Peter was not satisfied. As he scanned the journal for news about the stocks he owned, he noticed that the companies that made the news every day were the ones that grew through acquisitions. Led by CEOs who were larger than life, these companies grew at exponential rates by gobbling up their competition and embarking into new and different businesses. Reading about these acquisitions, Peter was struck by how much analysts liked these companies and their dynamic strategies. Tired of the staid management of the companies in which he owned stock, Peter sold off all his existing investments and invested heavily in the acquisitive companies that made the news.

For a few months, his strategy looked like it was paying off. The companies continued to post striking growth rates in revenues and earnings, and their stock prices outpaced the market as analysts continued to reward them with strong buy recommendations. The troubles began with a news story about an accounting restatement at one of the companies; its acquisitions, it turned out, had not been properly accounted for and the earnings of the company from previous years were adjusted downwards. Not surprisingly, its stock price fell but it was the ripple effect on the other companies that hurt Peter's portfolio. Many of the other companies in his portfolio had used the same accounting techniques as the company in trouble, and rumors of accounting troubles filled the air. As the stock prices in these companies plummeted, the CEOs went from heroes to villains and the analysts who until very recently had been so optimistic about these companies turned on them with a vengeance. Peter, sadder and wiser from the experience, sold his stocks and put his money back into boring companies.

*Moral: Slow and Steady beats Growth in haste.*

Growth does not come easily to companies. For a firm to grow rapidly it has to not only find a large number of new investments but these investments have to pay off quickly. Firms that are in a hurry to grow do not want to wait for this payoff to occur. Instead, they try to grow by acquiring other companies. Since they can fund these acquisitions by issuing new stock, there is no real limit (other than what the market will bear) on how many acquisitions these firm can do or how quickly they can grow, especially in buoyant markets.

Small companies adopting this strategy can very quickly become large companies, and in the process, may make their investors wealthy.

Acquisitions are large news events and get substantial coverage in the financial press. The announcements of acquisitions cause price convulsions, and it is not surprising that there are investment strategies based upon them. Some investors make their bets on acquiring companies, hoping to ride the growth that comes from acquisitions and other related benefits (synergy, for instance) to high returns. Other investors try to make money by investing in target companies either before or after acquisitions are announced. In this chapter, you will look at the potential for both strategies and some of the dangers involved.

### **The Core of the Story**

There are different arguments made for investing in acquiring companies and target companies. Consider first the arguments that are made for investing in acquisitive companies.

- *Invest in small companies that have found a way to speed the growth process.* Through the last four decades and especially in the last one, companies like WorldCom, Tyco and Cisco adopted strategies that were built around acquisitions to accelerate the growth process. WorldCom, a small telecomm company, showed that size does not have to be an impediment when it acquired MCI, which was several times its size in the late 1990s. Tyco acquired companies in different businesses, rapidly expanding its business mix and changing its character as a company during the same period. Most famously, Cisco went from being a small company in the early 1990s to briefly being the largest market cap company in the world in 1999, with a market capitalization close to \$ 500 billion. Investors in all three companies earned extraordinary returns during the period on the money that they had invested in these companies.
- *High Growth and it is cheap (at least in your accounting statements):* To understand why investors were attracted to acquisitive companies, you have to begin by first recognizing that most investors like to see growth in earnings and most do not care whether that growth comes from internal investments or from acquisitions. You have to follow this up by understanding how acquisitions are accounted for in accounting statements. If accounting rules allow firms to show the benefits of the growth from acquisitions, in the form of higher revenues and earnings, but hide (at least partially) the costs of the acquisitions, it should come as no surprise that acquisitive companies can look very good on a number of accounting dimensions. Earnings and revenues will grow rapidly while little additional investment is made in

capital (at least as measured in the financial statements). For several decades in the United States, firms were allowed to use “pooling” to account for acquisitions, if they qualified on a number of dimensions.<sup>1</sup> If an acquisition qualified for pooling treatment, only the book value of the assets of the company that was acquired was shown in the balance sheet and not the market value represented by the acquisition price. Thus if \$ 10 billion was paid for a company with a book value of \$ 1 billion, the new assets would show up with a value of \$ 1 billion (the book value) on the balance sheet but the extra \$ 9 billion that was paid would essentially disappear into the footnotes.

- *The CEO as genius*: One common feature that you often find in acquisitive companies is a high profile CEO, with a gift for self-promotion – Bernie Ebbers at WorldCom, Dennis Kozlowski at Tyco and Jack Welch at GE come to mind. This provides the second rationale that is often provided to investors for buying these companies. These CEOs, you will be told, are geniuses at the acquisitions game, often able to acquire companies at low prices and turn them around to deliver high values.

What about investing in target companies? After all, the real price surge that you see on acquisitions is in the companies that are acquired rather than in the acquiring firms. Not surprisingly, investment strategies built around target firms claim to have found a way to identify these firms before the announcements:

- *Private Sources*: The most common sales pitch, of course, is that private (and reliable) sources have provided information on an upcoming acquisition. If the sales pitch is true, it is almost certainly illegal, since any persons who have this information (employees at the companies, or the investment bankers involved in the deal) would be classified as insiders by the SEC. If it is not true, you are just chasing another rumor in the market.
- *Analytical models*: Some investors argue that you can use analytical devices or metrics to identify potential takeover targets. These metrics can range from sudden increases in trading volume (indicating that someone is accumulating large numbers of shares in the company) to fundamentals (low PE ratios and poor management). While not every potential target will be taken over, you can still generate high returns even if a small proportion of the firms you invest in get taken over.

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<sup>1</sup> One requirement to qualify for pooling was that an acquisition had to be financed entirely with stock. Another is that you face restrictions on selling the assets of the acquired firm in the year after the acquisition.

Other investors settle for a less ambitious strategy of investing in companies after they have become targets in acquisitions, hoping to make money as the transaction price is finalized or from a bidding war (between two acquirers).

## **The Theory: Acquisitions and Value**

If an acquisition creates value, it is possible that both the acquiring and acquired firm stockholders can walk away with more money in their pockets after the transaction. Even if an acquisition can create value, though, the division of value between stockholders of the acquiring and acquiring firms will depend critically on the acquisition price. If an acquiring company pays too much for a target firm, relative to value created in the acquisition, its stock price will go down, but target company stockholders will gain proportionately.

### **Acquisitions and Value Creation**

Can a firm create value by acquiring other firms? While taking a skeptical view of this proposition, you can, at least in theory, see ways in which acquisitions and mergers can increase value. A company can acquire companies that are undervalued by the market and take advantage of market mistakes, thus playing the role of a canny portfolio manager. A merger can work by creating synergy, a rationale much used and misused in acquisitions. Finally, a firm can also create value by buying poorly managed, poorly run firms and turning them around. In this section, each of these value-creating motivations will be described.

#### ***Acquire undervalued firms***

If markets make mistakes in pricing companies, an acquirer can conceivably buy a company at a bargain price, relative to its value. The acquirer can then gain the difference between the value and the purchase price. 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:* This capacity would require either access to better information than is available to other investors in the market, or a better analytical tools than those used by other market participants.
2. *Access to the funds that will be needed to complete the acquisition:* Knowing a firm is undervalued does not necessarily imply having capital easily available to carry out the acquisition. Access to capital depends upon the size of the acquirer – large firms will have more access to capital markets and to internal funds than smaller firms or individuals – and upon the acquirer’s track record – a history of success at identifying and acquiring under valued firms will make subsequent acquisitions easier.

3. *Skill in execution*: If the acquirer, in the process of the acquisition, drives the stock price up to and beyond the estimated value, there will be no value gain from the acquisition. To illustrate, assume that the estimated value for a firm is \$ 100 million, and that the current market price is \$ 75 million. In acquiring this firm, the acquirer will have to pay a premium. If that premium exceeds 33% of the market price, the price exceeds the estimated value, and the acquisition will not create any value for the acquirer.

While the strategy of buying under valued firms has a great deal of intuitive appeal, it is daunting, especially when acquiring publicly traded firms in reasonably efficient markets, where the premiums paid on market prices can very quickly eliminate the valuation surplus. The odds are better in less efficient markets or when acquiring private businesses.

### ***Create Operating or Financial Synergy***

The reason most commonly given as an explanation for the significant premiums paid in most acquisitions is synergy. Synergy is the potential additional value from combining two firms. Synergies can either come from operations or they can be financial.

Operating synergies are those synergies that allow firms to increase their operating income, to increase growth or to do both. You would categorize operating synergies into four types:

- *Economies of scale* that may arise from the merger, allowing the combined firm to become more cost-efficient and profitable. These are most likely to occur when you have two firms in the same business merging to create a larger firm.
- *Greater pricing power* from reduced competition and higher market share, which should result in higher margins and operating income. For this to occur, the competition has to be weak and fragmented, relative to the firm created in the merger.
- *Combination of different functional strengths*, as would be the case when a firm with strong marketing skills acquires a firm with a good product line. This presumes that the combined firm will retain both strengths and that the strengths will carry over into the new business.
- *Higher growth in new or existing markets*, arising from the combination of the two firms. For instance, this would be case when a US consumer products firm acquires an emerging market firm, with an established distribution network and brand name recognition, and uses these strengths to increase sales of its products.

Operating synergies can increase profit margins and expected growth, and through these increase the value of the firms involved in the merger or acquisition.

With financial synergies, the payoff can take the form of either higher cash flows or a lower cost of capital. Included are the following:

- A combination of a firm with excess cash, or *cash slack*, (and limited project opportunities) and a firm with high-return projects (and insufficient cash to fund them) can yield a payoff in terms of higher value for the combined firm. The increase in value comes from the investments that will be taken with the excess cash that otherwise would not have been taken. This synergy is likely to show up most often when large firms acquire smaller firms, or when publicly traded firms acquire private businesses.
- *Debt capacity* can increase, because when two firms combine, their earnings and cash flows may become more stable and predictable. This, in turn, allows them to borrow more than they could have as individual entities, which creates a tax benefit for the combined firm. This tax benefit can either be shown as higher cash flows, or take the form of a lower cost of capital for the combined firm.
- *Tax benefits* can arise either from the acquisition taking advantage of tax laws or from the use of losses to shelter income. Thus, a profitable firm that acquires a money-losing firm may be able to use the losses of the latter to reduce its tax burden.

Clearly, there is potential for synergy in many mergers. The more important issues are whether that synergy can be valued and, if so, how to value it.

### ***Take over poorly managed firms and change management***

Some firms are not managed well and others often believe they can run these firms better than the current managers. Acquiring poorly managed firms and removing existing managers, or at least changing existing management policies and practices, should make these firms more valuable, allowing the acquirer to claim the increase in value. This value increase is often termed the *value of control*.

While this story can be used to justify large premiums over the market price, the potential for its success rests on the following:

- The poor performance of the firm being acquired should be attributable to the existing management of the firm, rather than to market or industry factors that are not under management control.
- The acquisition has to be followed by a change in management practices, and the change has to increase value. Actions that increase value increase cash flows from existing assets, increase expected growth rates or reduce the cost of capital.
- The market price of the acquisition should reflect the status quo, i.e., the current management of the firm and their poor business practices. If the market price already

has the control premium built into it, there is little potential for the acquirer to earn the premium.

In the last two decades, corporate control has been increasingly cited as a reason for hostile acquisitions.

### **Acquisitions and Value Division**

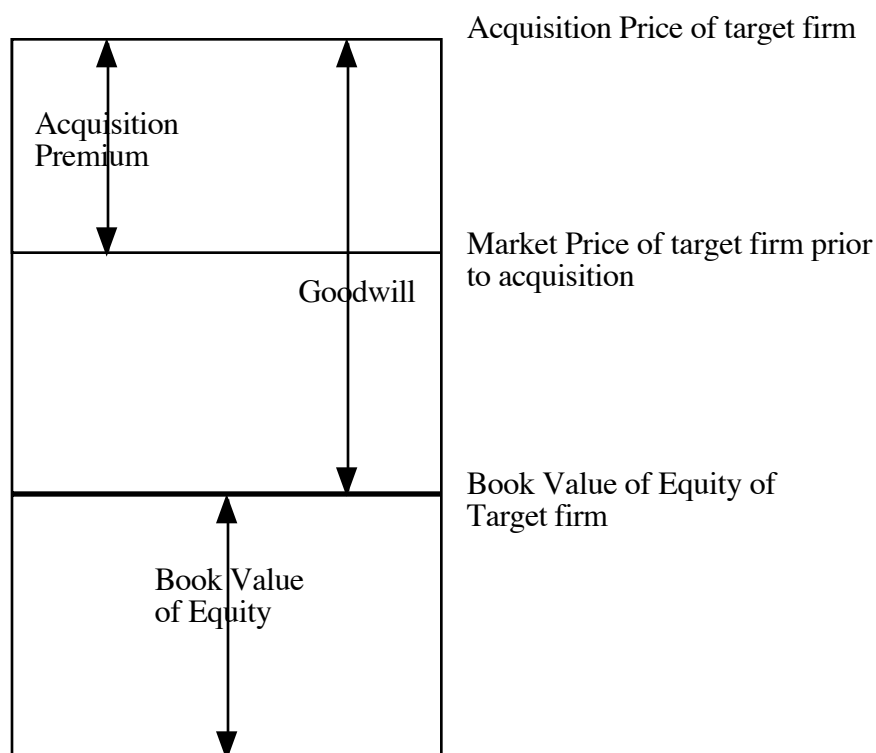
Acquisitions can be friendly or hostile events. In a friendly acquisition, the managers of the target firm welcome the acquisition and, in some cases, seek it out. In a hostile acquisition, the target firm's management does not want to be acquired. The acquiring firm offers a price higher than the target firm's market price prior to the acquisition and invites stockholders in the target firm to tender their shares for the price.

In either friendly or hostile acquisitions, the difference between the acquisition price and the market price prior to the acquisition is called the *acquisition premium*. The *acquisition price*, in the context of mergers, is the price that will be paid by the acquiring firm for each of the target firm's shares. This price is usually based upon negotiations between the acquiring firm and the target firm's managers. In a tender offer, it is the price at which the acquiring firm receives enough shares to gain control of the target firm. This price may be higher than the initial price offered by the acquirer, if there are other firms bidding for the same target firm or if an insufficient number of stockholders tender at that initial price. For instance, in 1991, AT&T initially offered to buy NCR for \$ 80 per share, a premium of \$ 25 over the stock price at the time of the offer. AT&T ultimately paid \$ 110 per share to complete the acquisition. There is one final comparison that can be made, and that is between the price paid on the acquisition and the accounting book value of the equity in the firm being acquired. This difference will be recorded as goodwill on the acquiring firm's books and written off in subsequent years<sup>2</sup>. Figure 10.1 presents the break down of the acquisition price into these component parts.

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<sup>2</sup> With the new accounting laws, the amortization of goodwill is based upon accounting estimates of the value of the acquired assets. If they feel that the value has been sufficiently impaired, the acquiring company can be forced to write off goodwill early.

Figure 10.1: Breaking down the Acquisition Price



The difference between the market value and the book value is usually categorized as goodwill. In some cases, though, you are allowed to write up the book value of the target firm at the time of the acquisition.

As a stockholder in an acquiring firm, you ultimately will gain or lose on an acquisition based not upon whether the acquisition creates value or not, but upon how much is paid for the acquired firm. The easiest way to see this is to think of an acquisition as a large project. If a company invests \$ 100 million in a project and gets back only \$90 million in value from the investment, its value will decrease by \$ 10 million. If a company acquires another company and pays more than it will get back in cash flows (inclusive of synergy, control and other benefits listed in the last section), its value will also drop by the amount of the overpayment.

Consider an example. Company A, with a market value of \$30 million, decides to buy company B with a market value of \$ 20 million and it believes that it can generate \$ 5 million in value from synergy. If company A can acquire company B for less than \$25 million, the stockholders of both companies will gain from the acquisition. If the acquisition price is \$ 25 million, the stockholders of company A will neither gain nor lose and company B's stockholders will gain the entire value of the synergy. If company A pays more than



\$25 million for company B, the stock price in company A will drop by the amount of the overpayment and company B's stockholders will gain proportionately.

## Evidence

In this section, you will begin with an analysis of how the announcement of an acquisition affects the market price of the target and acquiring firms on the day of the acquisition, and follow up by looking at the post-acquisition performance (operating and stock price) of acquiring firms.

### *The Acquisition Date*

The big price movements associated with acquisitions occur around the date the acquisition is announced and not when it is actually consummated, which may occur several months later. While much of the attention in acquisitions is focused on the target firms, what happens to the acquiring firm is just as interesting, if not more so.

### *Target Firms*

The evidence indicates that the stockholders of target firms are the clear winners in takeovers — they earn significant returns<sup>3</sup> not only around the announcement of the acquisitions, but also in the weeks leading up to it. In 1983, a review of thirteen studies that look at returns around takeover announcements and reported an average return of 30% to target stockholders in successful tender offers and 20% to target stockholders in successful mergers.<sup>4</sup> An examination in 1988 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.<sup>5</sup> The price behavior of a typical target firm in an acquisition is illustrated in Figure 10.2, from one of the studies,<sup>6</sup> in the 10 days before, the day of and the 10 days after an acquisition announcement.

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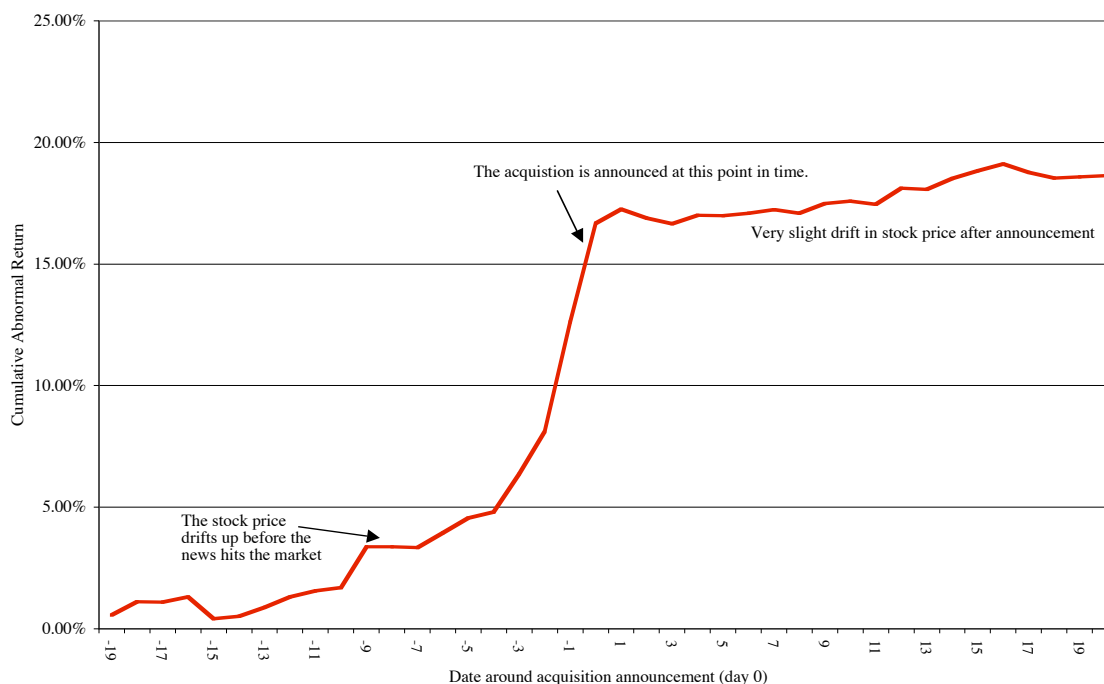
<sup>3</sup> The excess returns around takeover announcements to target firms are so large that using different risk and return models seems to have no effect on the overall conclusions.

<sup>4</sup> Jensen, M.C. and R.S. Ruback, 1983, *The Market for Corporate Control*, Journal of Financial Economics, v11, 5-50.

<sup>5</sup> Jarrell, G.A., J.A. Brickley and J.M. Netter, 1988, *The Market for Corporate Control: The Empirical Evidence since 1980*, Journal of Economic Perspectives, v2, 49-68.

<sup>6</sup> See Dennis and McConnell, 1986, *Corporate Mergers and Security Returns*, Journal of Financial Economics, v16, 143-188.

Figure 10.2: Cumulative Excess Return to Target Company Stock

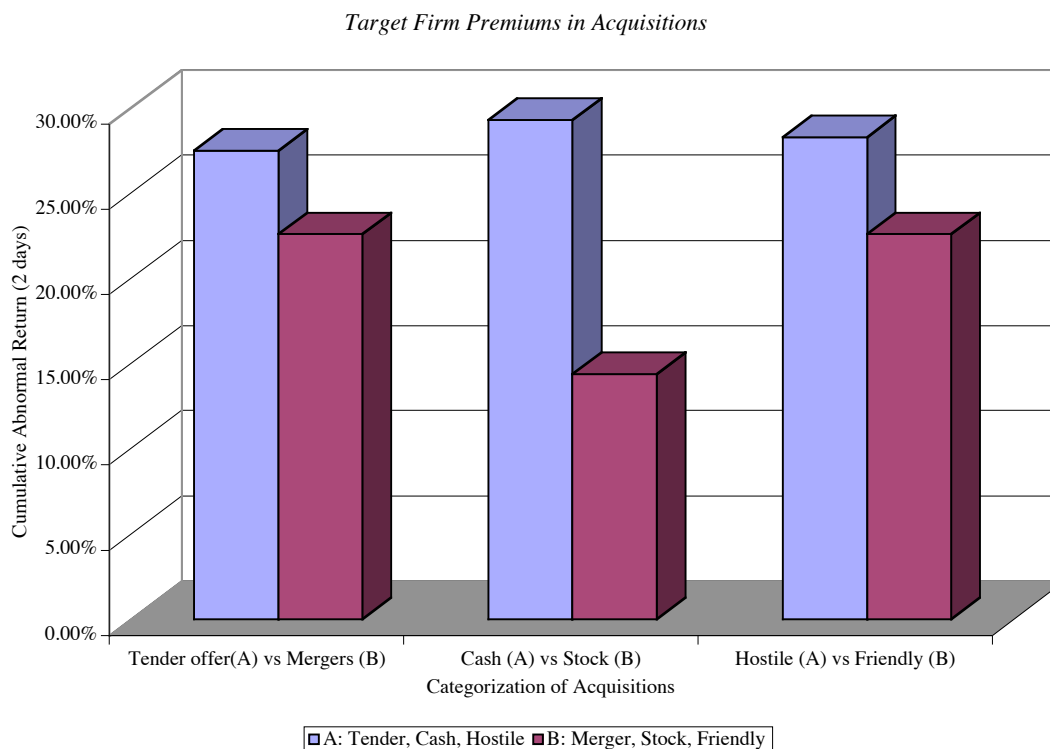


Data from Dennis and McConnell. The returns on the target firm stock is cumulated around the date of the acquisition.

Note that about half the premium associated with the acquisition is already incorporated in the price by the time the acquisition is announced. This suggests that news about acquisitions is leaked to some investors before it reaches the market, and these investors trade ahead of the announcement. On the acquisition date, there is an additional jump in the stock price but little evidence of prices drifting up thereafter.

If you categorize acquisitions based upon how the acquiring firm pays for them, you find that the stock prices of target firms tend to do much better on the announcement of cash-based acquisitions (where the acquirer uses cash only to pay for the acquired company's stock) than stock based acquisitions. The premiums in hostile acquisitions are larger than the premiums on friendly mergers and the premium on tender offers is slightly higher than the premium on mergers. Figure 10.3 provides an illustration of the magnitude of the differences:<sup>7</sup>,

<sup>7</sup> Huang and Walkling (1987), *Acquisition Announcements and Abnormal Returns*, Journal of Financial Economic, v19, 329-350.



Data from Huang and Walkling. These are the cumulated returns for target firm stockholders in different types of acquisitions.

No matter how you categorize acquisitions, stockholders in target firms have little reason to complain since they walk away with healthy price gains.

### *Bidding Firms*

The effect of takeover announcements on bidder firm stock prices is not as clear cut as it is for target firms. The survey of mergers in 1983 reported that stock prices increase about 4% for bidding firms around tender offers and find no evidence of price movement around mergers.<sup>8</sup> An examination of tender offers from 1962 to 1985, note a decline in returns to bidding firm stockholders from 4.4% in the 1960s to 2% in the 1970s to -1% in the 1980s.<sup>9</sup> Other research indicates that the stock prices of bidding firms drop in about half of all acquisitions around the announcement of takeovers, suggesting that investors are skeptical about the perceived value of these takeovers in a significant number of cases.

<sup>8</sup> Jensen, M.C. and R.S. Ruback, 1983, *The Market for Corporate Control*, Journal of Financial Economics, v11, 5-50.

<sup>9</sup> Jarrell, G.A., J.A. Brickley and J.M. Netter, 1988, *The Market for Corporate Control: The Empirical Evidence since 1980*, Journal of Economic Perspectives, v2, 49-68.

Considering the evidence, it is quite clear that bidding firm stockholders often do not share the enthusiasm that managers in these firms have about mergers and acquisitions. While managers would argue that this is because they are not privy to the information that is available only to insiders, you will see later in this chapter that many mergers fail and that stockholders are perhaps more prescient than managers.

*Does the market value synergy?*

Synergy is a stated motive in many mergers and acquisitions. An examination of the motives behind 77 acquisitions in 1985 and 1986 reported that operating synergy was the primary motive in one-third of these takeovers.<sup>10</sup> A number of studies examine whether synergy exists and, if it does, how much it is worth. If synergy is perceived to exist in a takeover, the value of the combined firm should be greater than the sum of the values of the bidding and target firms, operating independently. For example, assume that you have acquiring company A, trading at a total value of \$ 150 million before an acquisition, and target company B, trading at a total value of \$ 100 million. If these companies merge and there is synergy, the value of the combined company after the merger should be greater than \$250 million. Thus, if the combined company trades at a value of \$275 million, the synergy in this merger is being valued at \$25 million.

Examinations of stock returns around merger announcements generally conclude that the value of the combined firm does increase in most takeovers and that the increase is significant. An examination in 1988 of 236 inter-firms tender offers between 1963 and 1984 reported that the combined value of the target and bidder firms increased 7.48% (\$117 million in 1984 dollars), on average, on the announcement of the merger.<sup>11</sup> This result has to be interpreted with caution, however, since the increase in the value of the combined firm after a merger is also consistent with a number of other hypotheses explaining acquisitions, including under valuation and a change in corporate control. It is thus a weak test of the synergy hypothesis.

***From Announcement to Action***

Note that the studies presented above all look at the date on which an acquisition is announced and not at the actual transaction date that may be several weeks or even months

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<sup>10</sup> Bhidé, A., 1989, *The Causes and Consequences of Hostile Takeovers*, Journal of Applied Corporate Finance, v2, 36-59.

<sup>11</sup> Bradley, M., A. Desai and E.H. Kim, 1988, *Synergistic Gains from Corporate Acquisitions and their Division between the Stockholders of Target and Acquiring Firms*, Journal of Financial Economics, v21, 3-40.

later. There are clearly several things that can change between the two dates. In some acquisitions a new bidder shows up and a bidding war commences, pushing the price of the target company well above the initial offering price. Some acquisitions fail, either because the target firms fight off bidders using legal and financial devices or because the acquiring firms develops cold feet and withdraws its bid. Finally, in other acquisitions, the bidding firm is forced to raise its price because it has difficulty accumulating a controlling stake at the stated price.

### *Multiple Bidders*

When a firm acquires multiple bidders, it is almost always good news for the target company's stockholders and bad news for the bidding company's stockholders. The premiums paid for target firms are generally much higher when there are multiple bidders and there is evidence that the stock of the bidding firm that wins the bidding war is more likely to go down than up when it succeeds. However, the bidding firm that fails in an acquisition bid, is also often punished. One analysis of failed mergers reports significant drops in stock prices (of approximately 8%) for bidder firm stockholders who lose out to a rival bidder within 180 trading days of the announcement, and no excess returns when no rival bidder exists.<sup>12</sup>

### *Failed Bids*

Bids can fail either because the target firm in a hostile acquisition manages to fight off the acquisition or because the bidding firm changes its mind. In both cases, the stock of the bidding firm suffers on the announcement of the failure. The target firm stock price will also fall in both cases, but not to the levels before the acquisition attempt was made. Investors seem to reassess the value of firms when they become targets of acquisitions, on the assumption that the bidding firm has some information that the rest of the market does not or that there will be other bidders down the road. An examination the effects of takeover failures on target firm stockholders concluded that while the initial reaction to the announcement of the failure is negative, albeit small, a substantial number of target firms are taken over within 60 days of the first takeover is failing, earning significant excess returns (50% to 66%).

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<sup>12</sup> Bradley, M., A. Desai and E.H. Kim, 1983, *The Rationale behind Interfirm Tender Offers*, Journal of Financial Economics, v11, 183-206.

### *Merger or Risk Arbitrage*

There are some investors, mostly institutional, who believe that they can make money after a hostile acquisition is announced by buying stocks in target companies. As noted in the last section, the stock price of a target company jumps on the announcement of a takeover. However, it trades at a discount usually to the price offered by the acquiring company. The difference between the post-announcement price and the offer price is called the arbitrage spread, and there are investors who try to profit off this spread in a strategy called merger or risk arbitrage. If the merger succeeds, the investor captures the arbitrage spreads, but if it fails, he or she could make a substantial loss. In a more sophisticated variant in stock mergers (where shares of the acquiring company are exchanged for shares in the target company), the arbitrageur will sell short the acquiring firm's stock in addition to buying the target firm's stock.

The strategy is clearly mislabeled as risk arbitrage since there are no guaranteed profits (which is what arbitrage requires) and it is not quite clear why the prefix "risk" is attached to it. Notwithstanding this quarrel with terminology, you can examine whether risk arbitrage delivers the kinds of returns you often hear about anecdotally, and if it does, is it compensation for risk (that the merger may not go through) or is it an excess return? A sample of 4750 mergers and acquisitions was used to answer this question.<sup>13</sup> This analysis concludes that there are excess returns associated with buying target companies after acquisition announcements of about 9.25% annually, but that you lose about two thirds of these excess returns if you factor in transactions costs and the price impact that you have when you trade (especially on the less liquid companies).

While the overall strategy returns look attractive, the results also point to one unappealing aspect of this strategy. The strategy earns moderate positive returns much of the time, but earns large negative returns when it fails. Does this make it a bad strategy? Not at all, but it points to the dangers of risk arbitrage when it is restricted to a few big-name takeover stocks (as it often is)- an investor who adopts this strategy is generally just one big failure away from going under. If he or she borrows money to pursue this strategy, the risks are magnified.

### *After the Acquisition*

There is substantial research examining the extent to which mergers and acquisitions succeed or fail after the deals are made. The general conclusion is that mergers often fail to

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<sup>13</sup> Mitchell, M., and T. Pulvino, 2001. *Characteristics of risk in risk arbitrage*. *Journal of Finance*, v56, 2135-2175.

deliver on their promises of efficiency and synergy, and even those that do deliver seldom create value for the acquirers' stockholders.

The existence of synergy generally implies that the combined firm will become more profitable or grow at a faster rate after the merger than will the firms operating separately. A test of synergy is to evaluate whether merged firms improve their performance (profitability and growth) *relative to their competitors*, after takeovers. McKinsey and Co. examined 58 acquisition programs between 1972 and 1983 for evidence on two questions: (1) Did the return on the amount invested in the acquisitions exceed the cost of capital? (2) Did the acquisitions help the parent companies outperform the competition? They concluded that 28 of the 58 programs failed both tests, and six failed at least one test. In a follow-up study of 115 mergers in the U.K. and the U.S. in the 1990s, McKinsey concluded that 60% of the transactions earned returns on capital less than the cost of capital, and that only 23% earned excess returns.<sup>14</sup> In 1999, KPMG examined 700 of the most expensive deals between 1996 and 1998 and concluded that only 17% created value for the combined firm, 30% were value neutral and 53% destroyed value.<sup>15</sup>

An examination of the eight largest bank mergers in 1995 concluded that only two (Chase/Chemical, First Chicago/NBD) subsequently outperformed the bank-stock index.<sup>16</sup> The largest, Wells Fargo's acquisition of First Interstate, was a significant failure. In an incisive book on the topic in 1996 titled "The Synergy Trap," Sirower took a detailed look at the promises and failures of synergy and drew the gloomy conclusion that synergy is often promised but seldom delivered.<sup>17</sup>

The most damaging piece of evidence on the outcome of acquisitions is the large number of acquisitions that are reversed within fairly short time periods. An analysis<sup>18</sup> in 1990 noted that 20.2% of the acquisitions made between 1982 and 1986 were divested by 1988. A study published in 1992 found that 44% of the mergers studied were reversed, largely because the acquirer paid too much or because the operations of the two firms did

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<sup>14</sup> This study was referenced in an article titled "Merger Mayhem" that appeared in *Barrons* on April 20, 1998.

<sup>15</sup> KPMG measured the success at creating value by comparing the post-deal stock price performance of the combined firm to the performance of the relevant industry segment for a year after the deal was completed.

<sup>16</sup> This study was done by Keefe, Bruyette and Woods, an investment bank. It was referenced in an article titled "Merger Mayhem" in *Barrons*, April 20, 1998.

<sup>17</sup> Sirower, M.L., 1996, *The Synergy Trap*, Simon & Schuster.

<sup>18</sup> Mitchell, M.L. and K. Lehn, 1990, *Do Bad Bidders make Good Targets?*, Journal of Applied Corporate Finance, Vol 3, 60-69.

not mesh.<sup>19</sup> Studies that have tracked acquisitions for longer time periods (ten years or more) have found the divestiture rate of acquisitions rises to almost 50%, suggesting that few firms enjoy the promised benefits from acquisitions. The bottom line on synergy is that it exists in relatively few mergers and that it often does not measure up to expectations.

## Crunching the Numbers

Acquisitions come in such different forms that it is difficult to profile a typical acquisition. In the first part of this section, you will begin by looking across acquisitions to see if you can find common patterns to successes and failures. In the second part, you will try to construct a portfolio of acquiring companies as well as a portfolio of potential target companies.

### Acquiring and Acquired Firms

Is there a typical acquiring company? On the other side of the transaction, is there a typical target firm? If you want to construct an investment strategy that revolves around acquisitions, you have to attempt to at least answer these questions.

#### *Acquiring Firms*

Are there common characteristics shared by acquiring firms and especially by successful acquiring firms? If you look at a small sample of acquisitions or even all the acquisitions done during the course of a year, you will be hard pressed to find any commonalities across acquirers. Researchers, however, have looked at hundreds of acquisitions over long periods and they have identified some common features shared by successful acquirers over time:

- Firms that acquire firms of *similar size* (often called mergers of equals) seem to have a lower probability of succeeding than firms that focus on acquiring much smaller firms.<sup>20</sup> Thus the odds of success would be greater for GE, which acquired dozens of small companies each year during the 1990s, than with the merger of AOL and Time Warner, two companies with very large market capitalizations.
- Firms that are motivated by *cost savings* when doing acquisitions seem to have a better chance of succeeding than firms are motivated by growth hopes or expectations. This is especially so when the cost savings are concrete and planned for at the time of the

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<sup>19</sup> Kaplan, S. and M.S. Weisbach, 1992, *The Success of Acquisitions: The Evidence from Divestitures*, Journal of Finance, v47, 107-138.

<sup>20</sup> This might well reflect the fact that failures of mergers of equal are much more visible than failures of the small firm/large firm combinations.



acquisition. Some of the most successful mergers of the 1990s involved banks that merged to save money and gain economies of scale.

- Acquisition programs that focus on buying *small private businesses* for consolidations have had more success than acquisition programs that concentrate on acquiring publicly traded firms. Firms like Service Industries (funeral homes), Blockbuster Video (video rental stores) and Browning Ferris (waste disposal businesses) all grew by acquiring small private firms.

On the issue of synergy, the KPMG evaluation<sup>21</sup> of the 700 largest deals from 1996 to 1998 concludes the following:

- Firms that evaluate synergy carefully before an acquisition are 28% more likely to succeed than firms that do not.
- Cost-saving synergies associated with reducing the number of employees are more likely to be accomplished than new product development or R&D synergies. For instance, only a quarter to a third of firms succeeded on the latter, whereas 66% of firms were able to reduce headcount after mergers.

Some research finds improvements in operating efficiency after mergers, especially hostile ones<sup>22</sup>. An examination in 1992 concluded that the median post-acquisition cash flow returns improve for firms involved in mergers, though 25% of merged firms lag industry averages after transactions.<sup>23</sup> In 1999, another study examined 197 transactions between 1982 and 1987 and categorized the firms based upon whether the management is replaced (123 firms) at the time of the transaction, and the motive for the transaction.<sup>24</sup> The conclusions are that:

- On average, in the five years after the transaction, merged firms earned 2.1% more than the industry average.
- Almost all this excess return occurred in cases where the CEO of the target firm is replaced within one year of the merger. These firms earned 3.1% more than the

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<sup>21</sup> KPMG, 1999, *Unlocking Shareholder Value: The Keys to Success*, KPMG Global Research Report.

<sup>22</sup> A study by Healy, Palepu and Ruback (1989) looked at the post-merger performance of 50 large mergers from 1979 to 1983 and concluded that merged firms improved their operating performance (defined as EBITDA/Sales) relative to their industries.

<sup>23</sup> Healy, P.M., K.G. Palepu and R.S. Ruback, 1992, *Does Corporate Performance improve after Mergers?*, *Journal of Financial Economics*, v31, 135-176.

<sup>24</sup> Parrino, J.D. and R.S. Harris, *Takeovers, Management Replacement and Post-Acquisition Operating Performance: Some Evidence from the 1980s*, *Journal of Applied Corporate Finance*, v11, 88-97.

industry average, whereas firms, whereas when the CEO of the target firm continued in place the merged firm did not do better than the industry

In addition, a few studies examine whether acquiring related businesses (i.e., synergy-driven acquisitions) provides better returns than acquiring unrelated business (i.e., conglomerate mergers) and come to conflicting conclusions with no consensus.<sup>25</sup> An examination of 260 stock swap transactions and categorized the mergers as either a conglomerate or a ‘same-industry’ transactions.<sup>26</sup> They found no evidence of wealth benefits for either stockholders or bondholders in conglomerate transactions. However, they did find significant net gains for both stockholders and bondholders in the case of mergers of related firms.

### ***Target Firms***

Looking at the stock price reaction of target firms both immediately prior to and immediately after the acquisition announcement, it is quite clear that the money to be made in acquisitions comes from investing in firms before they become targets rather than after. Absent inside information, is this doable? There may be a way, and the answer lies in looking at firms that typically become target firms. Since the motivations in hostile and friendly acquisitions are very different, it should come as no surprise that the typical target firm in a hostile acquisition is very different from the typical target firm in a friendly takeover. The typical target firm in a hostile takeover has the following characteristics:<sup>27</sup>

- (1) It has *under performed other stocks in its industry* and the overall market, in terms of returns to its stockholders in the years preceding the takeover.
- (2) It has been *less profitable than firms in its industry* in the years preceding the takeover.
- (3) It has a *much lower stock holding* by insiders than do firms in its peer groups.

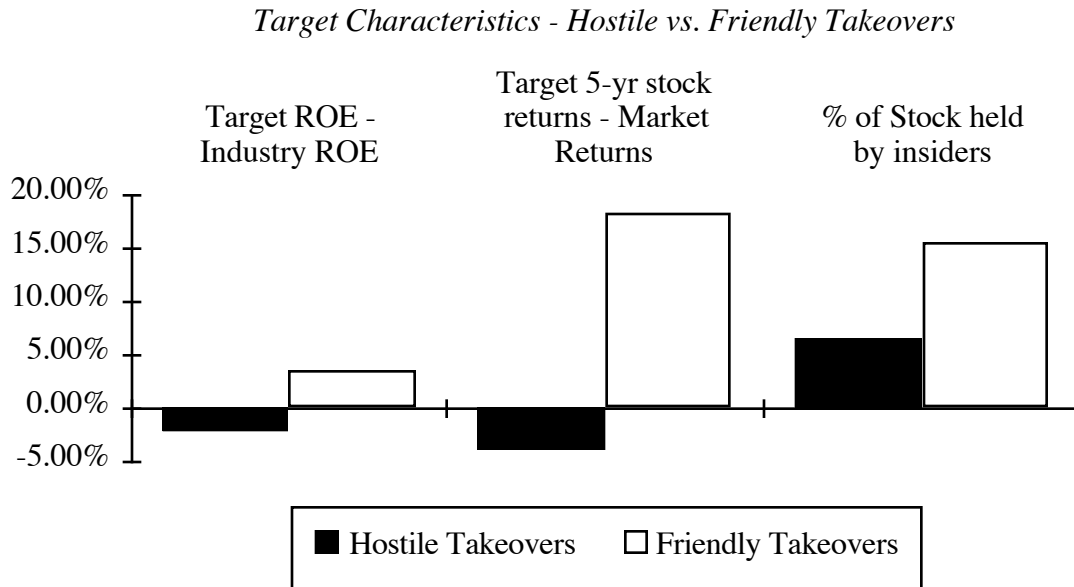
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<sup>25</sup> See Michel, A. and I. Shaked, 1984, *Does Business Diversification affect Performance?*, Financial Management, Vvol 13, 5-14 and Dubofsky, P. and P.R. Varadarajan, 1987, *Diversification and Measures of Performance: Additional Empirical Evidence*, Academy of Management Journal, 597-608. These studies find that diversification-driven mergers do better than synergy-driven mergers, in terms of risk-adjusted returns. Varadarajan, P.R., and V. Ramanujam, 1987, *Diversification and Performance: A Reexamination using a new two-dimensional conceptualization of diversity in firms*, Academy of Management Journal, Vol 30, 369-380. find evidence to the contrary.

<sup>26</sup> Nail, L.A. , W.L. Megginson and C. Maquieira, 1998, *Wealth Creation versus Wealth Redistributions in Pure Stock-for-Stock Mergers*, Journal of Financial Economics, v48, 3-33.

<sup>27</sup> Bhide, A., 1989, *The Causes and Consequences of Hostile Takeovers*, Journal of Applied Corporate Finance, v2, 36-59.

A comparison of target firms in hostile and friendly takeovers illustrates their differences. His findings are summarized in Figure 10.4.



Data from Bhide. This study compared the characteristics of target firms in friendly takeovers to those in hostile takeovers in the year of the takeover.

As you can see, target firms in hostile takeovers have earned a 2.2% lower return on equity, on average, than other firms in their industry; they have earned returns for their stockholders that are 4% lower than the market; and only 6.5% of their stock is held by insiders.

There is also evidence that these firms make significant changes in the way they operate after hostile takeovers. The study cited above examined the consequences of hostile takeovers and noted the following changes:

1. Many of the hostile takeovers were followed by an increase in debt, which resulted in a downgrading of the debt. The debt was quickly reduced with proceeds from the sale of assets, however.
2. There was no significant change in the amount of capital investment in these firms.
3. Almost 60% of the takeovers were followed by significant divestitures, in which half or more of the firm was divested. The overwhelming majority of the divestitures were units in business areas unrelated to the company's core business (i.e., they constituted reversal of corporate diversification done in earlier time periods).
4. There were significant management changes in 17 of the 19 hostile takeovers, with the replacement of the entire corporate management team in seven of the takeovers.

Thus, contrary to popular view<sup>28</sup>, most hostile takeovers are not followed by the acquirer stripping the assets of the target firm and leading it to ruin. Instead, target firms refocus on their core businesses and often improve their operating performance.

### Creating Portfolios

As an investor, you may find the evidence on successful acquiring and typical target firms interesting but not particularly relevant since they all represent mergers from the past. How, you may wonder, can you make money off an acquisition that occurred a decade ago? You cannot but you can use the evidence to construct portfolio of potential acquirers and target firms today.

### *A Portfolio of Acquiring Firms*

To construct a portfolio of acquiring firms, you have to look at history and examine the sources of growth for individual firms. For instance, table 10.1 reports on the most acquisitive companies in the United States between 2000 and 2002, based upon the dollar value of the acquisitions:

*Table 10.1: Most Acquisitive Companies – United States: 2000-2002*

<i>Company</i>	<i>Industry</i>	<i>Total acquisitions</i>	<i>Total value (\$ million)</i>
Comcast Corp.	Broadcasting	8	47,680.80
Citigroup Inc.	Banking & finance	18	21,350.50
General Electric Co.	Aerospace, aircraft & defense, banking & finance	71	\$19,725.00
Tyco International Ltd.	Electrical equipment	19	16,882.20
Johnson & Johnson	Toiletries & cosmetics	11	14,062.00
Nestle SA	Food processing	8	11,266.80
AOL Time Warner Inc.	Computer services, leisure & entertainment	13	8,984.20
AT&T Corp.	Communications	9	5,616.20
Schlumberger Ltd.	Energy services	9	5,242.90
Berkshire Hathaway Inc.	Insurance	13	4,776.00
J.P. Morgan Chase & Co.	Banking & finance	12	4,442.40
Cendant Corp.	Miscellaneous services	33	3,797.80

<sup>28</sup> Even if it is not the popular view, it is the populist view that has found credence in Hollywood, in movies like *Wall Street*, *Barbarians at the Gate* and *Other People's Money*.

BB&T Corp.	Banking & finance	23	3,098.70
Solectron Corp.	Electronics	12	2,496.40
Calpine Corp.	Electric, gas, water & sanitary services	9	2,494.80
Microsoft Corp.	Computer software, supplies & services	8	2,402.20
Intel Corp.	Electronics	11	1,943.10
VeriSign Inc.	Computer software, supplies & services	8	1,647.90
Interpublic Group of Cos.	Miscellaneous services	12	1,605.30
NRG Energy Inc.	Electric, gas, water & sanitary services	10	1,510.70
SPX Corp.	Fabricated metal products	10	1,447.90
Baxter International Inc.	Drugs, medical supplies & equipment	8	1,185.20
Danaher Corp.	Industrial & farm equipment & machinery	11	1,075.40

Source: [www.mergerstat.com](http://www.mergerstat.com)

Note the wide range of industries from which the acquisitive companies are drawn and the number of deals made by some of them. GE, for instance, bought 71 companies in this two-year period, though they tended to be smaller on average than the 8 companies bought by Comcast during the same time period.

There is clearly a bias towards larger firms introduced when you rank firms based on the dollar value of acquisitions. To get a true sense of how much of each of these acquiring companies relies on acquisitions for growth, you would also have to scale the value of the acquisitions by the value of the acquirers. For example, the \$2.4 billion spent by Microsoft on acquisitions was less than 1% of overall market value while AT&T's acquisition spending of \$5.6 billion is about 20% of its market value. You could construct a portfolio of acquiring firms, based upon how much acquisitions represent as a fraction of firm value. That portfolio would look very different from the one in table 10.1 and include smaller companies.

### ***A Portfolio of Potential Targets***

If you consider the evidence on typical target firms in acquisitions, you could develop a set of screens that incorporate the variables mentioned above. You could, for instance, invest in smaller companies (in market capitalization terms), with low insider holdings, depressed valuations (low price to book ratios or low price earnings ratios) and low returns on equity (relative to their sectors).

To put these screens into practice, potential target firms were categorized as firms with the following characteristics:

- *Small companies*: Since it is easier to acquire smaller companies than larger ones, only firms with market capitalization less than \$ 500 million are considered for this portfolio.
- *Low Insider holdings*: Only firms with insider holdings less than 10% of the outstanding stock are included in the portfolio. In addition, firms with different voting class shares were removed, since they are less likely to be targeted for hostile acquisitions.
- *Cheap Stocks*: Only stocks that trade at a trailing PE ratio less than 12 are considered cheap and worthy of inclusion in the portfolio.
- *Poor project returns*: Only firms that have returns on equity that are 5 percentage points lower than the industry average are included in the portfolio.

The resulting portfolio of 15 firms is listed in Table 10.2.

*Table 10.2: Potential Takeover Targets*

<i>Company Name</i>	<i>Industry Name</i>	<i>Stock Price</i>	<i>P/E Trailing 12 Mo</i>	<i>Market Cap \$ (Mil)</i>	<i>% Insider Holdings</i>
AMN Healthcare	Human Resources	11.22	9.6	456.6	3.6
Blair Corp.	Retail (Special Lines)	24	9.7	186.2	8.69
Chesapeake Corp.	Packaging & Container	16.13	10.2	228.2	5.6
Cone Mills	Textile	2.01	6.4	48.2	9.3
Crompton Corp.	Chemical (Specialty)	4.03	8.1	443.6	7.6
Culp Inc.	Textile	4.45	6	54.5	4.5
Enesco Group	Retail (Special Lines)	6.91	11.8	90.3	3.8
Information Resources	Information Services	1.32	11.7	41.4	7.1
Int'l Multifoods	Food Processing	19.2	11.6	334.5	5.8
Intermet Corp.	Auto Parts	3.58	10.2	91	3.1
Myers Inds.	Diversified Co.	9.57	11	264.5	2.7
SEMCO Energy	Natural Gas (Distrib.)	4.12	7.5	74.3	1.3
ShopKo Stores	Retail Store	10.85	6.7	292.2	3.5
Standard Register	Office Equip/Supplies	14.84	10.6	372.9	2.7
Wellman Inc.	Chemical (Specialty)	9.59	10.8	284.5	6.7

There are clearly no guarantees that any or all of these firms will become targets of hostile takeovers, but the portfolio will generate high returns even if only two or three of the firms become takeover targets.

## **The Rest of the Story**

Assuming that you decide to create a strategy of investing in companies right after acquisitions, what are some of the factors that may undercut your chances of success? The factors to consider will clearly vary depending upon the investment strategy you adopt. If you buy acquisitive firms, you will have to worry about both financial overreach (paying too much for acquisitions) and operational over reach (where you expand too quickly into new businesses putting existing businesses at risk). If you buy potential target firms, you have to allow for the fact that they may never be taken over and that you will be saddled with a portfolio of poor performing stocks.

### **Investing in the Acquiring Firms**

Consider investing in a portfolio of acquisitive firms. Even if you are careful about picking firms that seem to have succeeded with their acquisition strategies, there are a number of possible risks in the strategy.

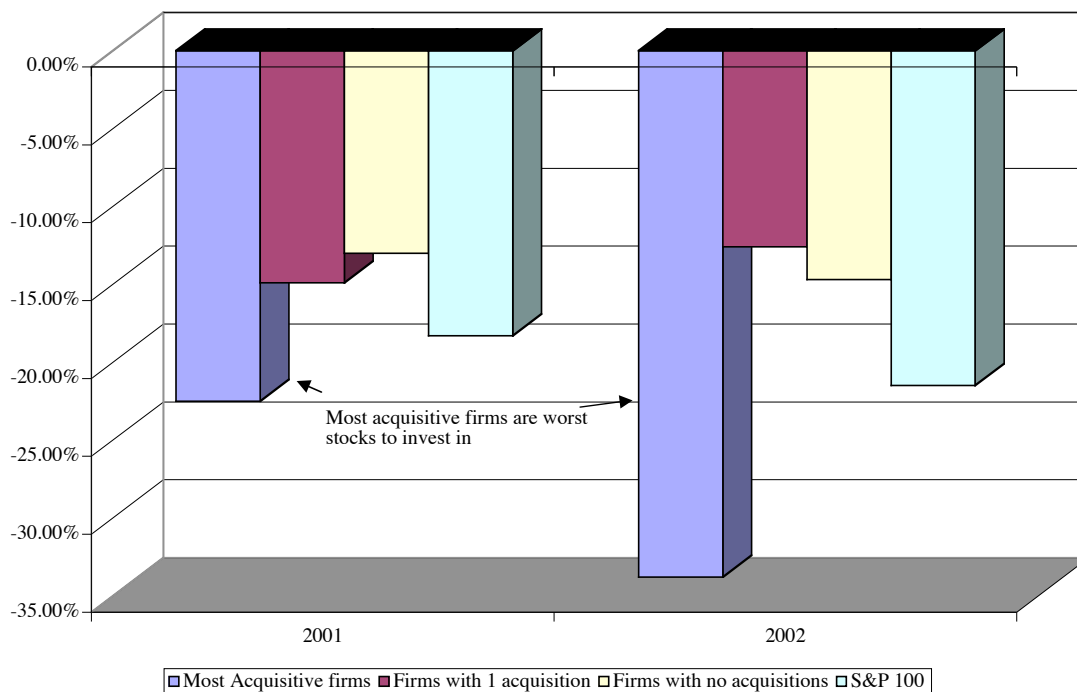
#### ***Overpaying on Acquisitions***

Past success at acquisitions does not preclude future failures. In fact, a firm that grows successfully through acquisitions will find that its very success often lays the groundwork for future failure. Take, for instance, a firm like Cisco that established a clear record of success in the early 1990s from its acquisition strategy. Starting in 1991, when it had revenues of \$183 million, earnings of \$43 million and a market capitalization of about \$4 billion, Cisco acquired small companies with promising technologies and was able to turn these technologies into great products and earnings growth in short periods. Each year that it succeeded it became a larger firm, both in terms of revenues and market capitalization. To sustain its growth rate, it had to increase both the scale and the number of acquisitions it did each year. By 1999, Cisco had \$12.15 billion in revenues and a market capitalization in excess of \$ 400 billion, and finding enough acquisition to make a dent in its growth rate had become much more difficult to do. The danger to investors is not that this happens but that a firm that has had past success at acquisitions will continue its push towards more acquisitions even in the face of difficulty finding good target firms. In the process, it may well abandon the discipline that made it successful in the first place. You could look at almost every acquisitive firm that has failed and point (at least in hindsight) to the moment when this occurred.

Over time, there is evidence that acquisitive companies have proven to be poor investments, lagging the market in stock returns. Figure 10.5 contrasts the returns in 2000 and 2001 that investors would have earned on the 15 most acquisitive companies in the

S&P 100, based upon acquisitions made between 1998 and 2001 (100 largest market cap firms in the US) with the returns they would have earned on companies that did only one acquisition and companies did not do any acquisitions.

Figure 10.5: Returns on Acquisitive Firms



Data from Compustat. The most acquisitive firms are the firm that made the most acquisitions (in numbers) in the S&P 500 between 1998 and 2001.

Investors in the most acquisitive firms would have lagged the market and investors in firms that did no acquisitions by more than 10% a year between 2001 and 2002.

How would you screen acquisitive firms to eliminate those that are most likely to overpay? There are several statistics that you can look at. One is the average premium paid by acquiring firms for their acquisitions; firms that pay larger premiums are more likely to have overpaid. The second is to look at the average size of the acquired firms relative to the acquiring firms; again, research indicates that you are more likely to overpay on large acquisitions than on smaller ones. The third is to look at the market reaction to the acquisition announcement; an increase in the acquirer's market price on the acquisition announcement is a much better signal of future success than a decrease.



### ***Accounting Complexity***

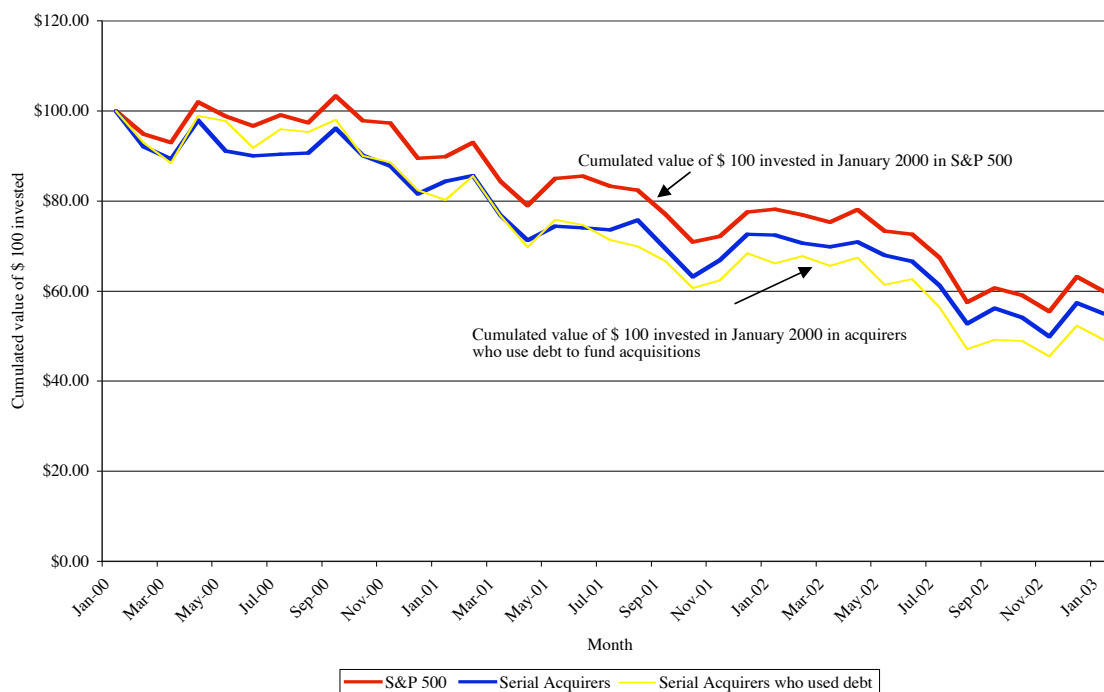
Accounting for acquisitions is much more complicated than accounting for internal investments. To begin with, you have more choices in how you record the transaction. Until 1999, you could structure an acquisition as either a purchase or a pooling, with dramatically different consequences for accounting statements. With a purchase transaction, you show the price of the company that you acquire in your balance sheet but you also create a new asset (goodwill) to record the difference between what you pay for the company and the book value of its assets. With pooling, you do not record the purchase price and instead show only the book value of the assets of the company that you acquire as part of your assets. In 2001, the practice of pooling was finally eliminated but firms still have to deal with goodwill after a transaction. In fact, the accounting standards now require firms to revisit their past acquisitions and write off portions of goodwill, if they feel that they overpaid. AOL Time Warner wrote off \$ 100 billion to reflect the reduction in value of AOL's assets between the time of the merger in 1999 and the write off in 2001.

The most significant evidence that acquisitive firms are more likely to be exposed to accounting problems comes from looking at history. It is telling that of the 10 most acquisitive firms of the 1990s, serious accounting problems were unearthed at 7 firms – Enron, WorldCom, Tyco, Lucent, Cendant, AOL Time Warner and Conoco. In fact, the perception was that some of these firms not only bent the accounting rules but broke them. As an investor, you have to allow for the possibility that acquisitive companies will have financial statements that are more difficult to analyze than companies that do not do acquisitions. In addition, you may find yourself having difficulty with the most fundamental questions that you need answered about any firm such as how much capital is invested in the firm, what returns the firm is making on its investments and how much of the firm's earnings are being reinvested back into the business.

### ***Debt and Dilution***

There are two ways in which acquisitive firms pay for acquisitions and both can potentially have negative consequences for investors. One is to issue new stock to fund the acquisition, increasing the number of shares outstanding and reducing earnings per share at least in the near term. The other is to borrow the money to raise the necessary funds, which can increase default risk and over burden the company with interest and principal payments. In fact, Figure 10.6 indicates that the stock performance of serial acquirers who borrow to fund their acquisitions is even worse than the stock performance of serial acquirers who use stock or cash, and that both groups lag the overall market:

Figure 10.6: Acquirers with Debt vs Rest of the Market



Data from CRSP. The cumulated value of \$ 100 invested in stocks with dividends reinvested is reported for each of the three portfolios.

While the conclusions you can draw are constrained by the fact that you are looking at a short and very volatile time period, when the market declined you should clearly be cautious about acquisition strategies based upon debt. One way you can measure this dependence is to look at a firm's debt ratio relative to its peer group. A combination of over dependence on debt and large acquisitions should show up as high financial leverage.

### ***Lack of Focus***

Acquisitive firms are more likely to go into businesses unrelated to their primary business than non-acquisitive firms. After all, it takes considerable work and expertise for a steel company to enter the software business on its own but it can acquire a software company and accomplish the same objective quickly. It should come as no surprise that conglomerates are usually created through a series of acquisitions rather than with internal investments in a dozen different business areas. As an investor, though, this temptation to stray into other businesses can be dangerous. Studies generally find that conglomerates trade at a discount, relative to the value of their component parts, which is attributed by some to lack of management focus and by some to waste. Whatever the reason for the discount, you may want to invest only with acquisitive companies that stay within their area of business expertise.

### **Investing in Target Firms**

If you had a mechanism for perfectly identifying target firms before they become targets in acquisitions, you would be able to reap incredible rewards. You would probably also have some very curious agents from the SEC quizzing you about your uncommon success. After all, the only way in which investors have been able to do this historically with any consistency is by having access to inside information. If you are staying on the right side of the law and screening stocks for potential takeover targets, your success rate will be much lower and herein lies the risk to this strategy.

### ***Entrenched Management***

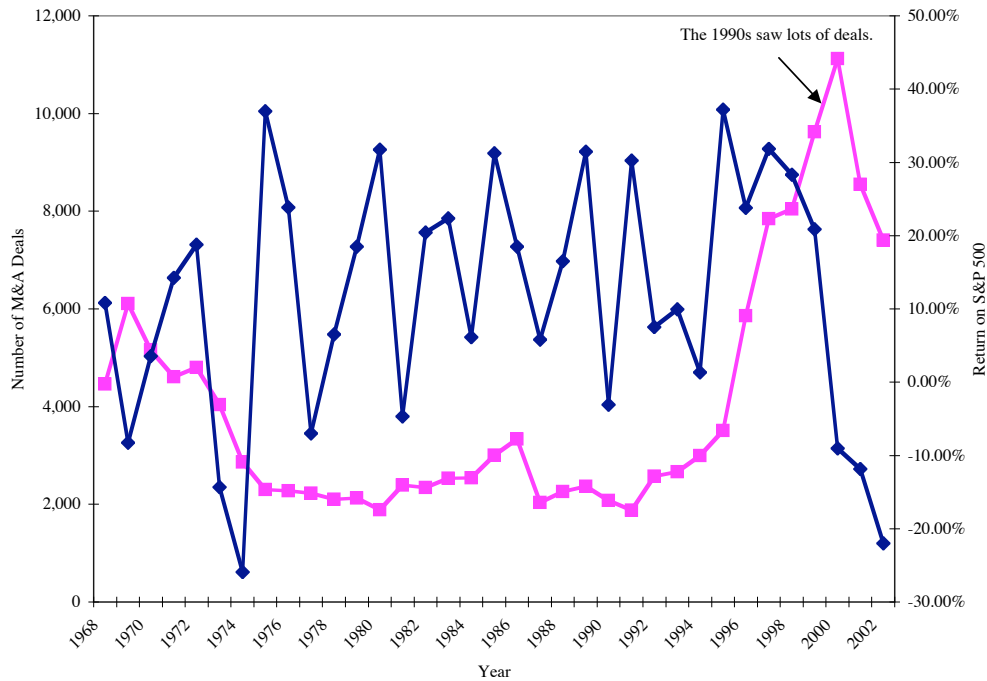
One of the indicators that you use to find potential target firms is poor management. That is why you look for firms which have made poor investments (low returns on equity) and whose stock has underperformed the market and the sector. You buy stock in these firms hoping that the management will change, but what if it does not? You could end up with a portfolio of companies with incompetent management who continue to destroy value while you hold the stock.

Consider the 15 firms listed in Table 10.2 as potential takeover targets. Looking at the past history of these firms, it is quite clear that the factors that make them potential targets have been in place for a number of years. Furthermore, the CEOs of ten of these firms have been in their positions for five years or more. It is difficult to conceive of a quantitative screen that can find firms where managers are not entrenched. You could use a “length of tenure” screen (where you avoid firms where CEOs have been in place for more than five years) or a qualitative screen (where you only invest in firms with boards of directors that are responsive to stockholders). In either case, you will still be left with considerable uncertainty about future success at changing management.

### ***Market Mood***

Mergers and acquisitions often track the market, rising in buoyant markets and falling in bear markets. Figure 10.7 graphs the ebb and flow of merger activity between 1968 and 2002:

Figure 10.7: M&amp;A Activity and Stock Returns



Data from Mergerstat. These represent the number of deals made each year. If you invest in a portfolio of potential target firms, you could very well be blindsided by a shift in market mood that makes rarer both hostile and friendly acquisitions. Another characteristic of acquisition activity is that it tends to be concentrated in a few sectors in each period – telecommunication and technology mergers dominated in the late 1990s – and the sectors shift from period to period.

What are the implications for a strategy of investing in potential acquisitions? The first is that such a strategy is partially based upon your market timing skills (or luck). Even if your portfolio of potential takeover targets is well constructed, the number of firms that actually get taken over may not measure up to expectations if the market mood turns sour. The second is that you have to factor in a sector focus in your portfolio. In other words, you should try to invest far more of your portfolio in stocks in the sectors where consolidation and mergers are occurring the most.

### **Risk**

If you buy firms that are poorly managed and poorly run, your upside comes when someone offers to take over the firm and run it better but there is a downside. These poorly managed firms can also go bankrupt. A portfolio of potential takeover targets will therefore also often have considerable risk exposure. There are a number of dimensions on which you can consider risk:

- *Financial leverage:* A poorly run firm with substantial debt is clearly more at risk than a poorly managed firm without this debt. In fact, of the 15 firms identified as potential takeover targets in Table 10.2, seven firms have debt in excess of 50% of total capital. If these firms begin losing money, they will not survive.
- *Beta and standard deviation:* Stocks that have performed poorly in the past, both in terms of stock and project returns, are usually volatile. The standard deviation of the 15 firms listed in Table 10.2 is about twice the average for the rest of the market; the average beta for these companies is 1.43, again well above the average for the market.

To avoid exposing your portfolio to these risks, you could only invest in firms with low debt ratios and less stock price volatility.

### **Lessons for Investors**

Investment strategies based upon acquisitions may sometimes generate high returns but they come with risks. If you invest in acquisitive companies, hoping to ride growth in revenues and earnings to higher stock prices, you should consider screening for the following characteristics in acquisitive firms.

- *Start with acquirers who stay focused and disciplined:* Acquisitive firms that attempt to stay within their core businesses or play to their key strengths when making acquisitions should be considered better candidates for your portfolio. These firms will also need to maintain that discipline even in the face of pressure from the outside.
- *And don't overpay for target firms:* The key determinant of whether you as an investor gains from acquisitions is the acquisition price. An acquisitive firm that does a good job of valuing synergy and control should then follow up by ensuring that it gets at least a share of these perceived benefits for its stockholders. Acquisitive firms that enter into bidding wars intent to win at any cost usually do, but their stockholders pay the price.
- *And prudently fund their acquisitions:* Acquisitive firms that fund acquisitions without pushing their debt ratios above acceptable levels or viewing their own stock as free currency are likely to be better investments in the long term.
- *Avoid accounting complexity:* Acquisitive firms that try to present the most information they can about acquisitions and that do not play accounting games are much better investments in the long term.

If you adopt these screens, you will find that the best stocks for your portfolio will not be the serial acquirers who make the news with their big deals but the smaller acquirers who do

not make the news. Notwithstanding these screens, you constantly have to monitor the firms you invest in to ensure that they (and their chief executives) are not overreaching.

If you believe that you have a better chance of success by investing in potential takeover targets, the last section suggests possible screens.

- *Start with poorly managed companies:* Your odds of success are greatest with companies where managers not only do a poor job in terms of where they invest resources (return on equity more than 4% below the peer group ROE) but also generate sub-par returns for their investors (stock returns over last year lag peer group returns by more than 5%).
- *Avoid entrenched managers:* Shift your portfolio towards those companies where insiders hold relatively little stock (insider holdings less than 10%), there are no anti-takeover amendments on the books and where the CEO has not consolidated his or her hold on power.
- *Reduce exposure to Risk:* To reduce your exposure to risk, steer away from companies with too much debt (debt to capital ratios that exceed 50%) or high stock price volatility (annualized standard deviation in stock prices exceeds 80%).

Combining these screens, a portfolio of 17 stocks was generated in March 2003. The appendix lists the stocks in the portfolio.

## Conclusion

Acquisitions make the news for obvious reasons. They cause stock prices to move dramatically and it is not surprising that investors are attracted to companies involved in acquisitions. Some investors are drawn to acquiring firms, attracted by the rapid growth in earnings and revenues posted by these firms. If there is a lesson to be learnt from history, it is that serial acquirers generally do not make good investments. All too often, they overpay for target firms, expand into businesses they do not understand and over reach by borrowing too much to fund their growth. While they are able to often cover their weaknesses in their financial statements, their problems ultimately catch up with them.

The largest payoff in acquisitions is to those who hold stock in target firms at the time the acquisitions are announced. To earn these returns, though, you have to buy these firms before they become acquisition targets; buying shares after an acquisition is announced is a risky strategy with limited returns. Looking at the typical target firms in past acquisitions, you can develop a set of screens for identifying potential target firms in future acquisitions. They tend to be poorly managed, have low insider ownership and earn poor returns both for their stockholders and on projects.

*Appendix: Potential Takeover Targets among US companies – March 2003*

<i>Company Name</i>	<i>Ticker Symbol</i>	<i>Industry Name</i>	<i>Stock Price</i>	<i>P/E Trailing 12 Mo</i>	<i>Market Cap \$ (Mil)</i>	<i>% Insider Holdings</i>	<i>% Debt/Capital Latest Qtr</i>	<i>Std Dev 3-Year</i>	<i>Return on Common Equity</i>	<i>Industry Average</i>
Universal Corp.	UVV	Tobacco	37.09	8.7	949.7	1.8	46	34.87	18.14%	35.85%
ICN Pharmaceuticals	ICN	Drug	8.82	9.9	709.1	8.3	38.1	64.3	10.5%	24.29%
Saks Inc.	SKS	Retail Store	7.87	11.1	984.4	9.8	38.9	60.78	1.04%	13.11%
Libbey Inc.	LBY	Household Products	25	10.5	379.3	6.3	44.3	32.18	23.82%	35.46%
Conmed Corp.	CNMD	Medical Supplies	16.01	11.8	429.9	8.5	39.8	48.3	8.6%	19.63%
Wellman Inc.	WLM	Chemical (Specialty)	9.59	10.8	284.5	6.7	25.3	47.4	1.36%	10.30%
Blair Corp.	BL	Retail (Specialty Lines)	24	9.7	186.2	8.69	0.2	38.07	2.24%	10.71%
Information Resources	IRIC	Information Services	1.32	11.7	41.4	7.1	2.8	77.16	2.71%	11.14%
Hughes Supply	HUG	Retail Building Supply	24.8	9.1	509.9	6.6	40.1	48.19	7.41%	15.80%
Building Materials	BMHC	Retail Building Supply	14.25	7.7	174.7	5.9	39.8	40.15	8.78%	15.80%
Myers Inds.	MYE	Diversified Co.	9.57	11	264.5	2.7	47.9	44.4	6.98%	12.51%
Cambrex Corp.	CBM	Chemical (Diversified)	23.7	10.8	550.5	13.5	41.8	36.48	12.96%	17.95%

Phillips-Van Heusen	PVH	Apparel	11.97	11	329.5	4.09	46.3	39.56	9.06%	13.93%
Standard Register	SR	Office Equip/Supplies	14.84	10.6	372.9	2.7	38.5	44.69	6.66%	11.53%
Armor Holdings	AH	Aerospace/Defense	9.92	11.6	287.8	13.7	3.4	48.6	5.96%	10.78%
IHOP Corp.	IHP	Restaurant	23.72	11.2	449.7	9.5	39.8	30.93	12.89%	17.36%
AnnTaylor Stores	ANN	Retail (Special Lines)	19.34	11.1	791.3	3.5	14.7	55.64	6.43%	10.71%