CHAPTER 1

MERGERS AND ACQUISITIONS: AN OVERVIEW[1]

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INTRODUCTION

The 1990s featured the most intense period of mergers and acquisitions in U.S. economic history. This period is now recognized as the fifth merger wave in U.S. history. Merger waves are periods of unusually intense merger and acquisition activity.[2] There have been five such periods since the start of the twentieth century, with the previous one occurring in the 1980s. This wave featured many record-breaking mergers. When it ended in the late 1980s, many thought that there would be an extended period of time before another one began. However, after a short hiatus, an even stronger merger wave took hold, far eclipsing that of the 1980s.

The merger wave of the 1990s was path breaking due to the dollar value of the transactions and the unusually high number of deals (see Exhibits 1.1a and 1.1b). While the fourth wave of the 1980s was known for both its megamergers and its colorful hostile deals, the fifth wave has featured far larger deals, as well as a good supply of hostile transactions.

Fifth Merger Wave Exported to Europe. While the fourth merger wave of the 1980s was largely confined to the United States, large-scale mergers and acquisitions finally made their way to Europe in the mid-1990s.[3] In recent years, cross-border deals within Europe have grabbed the headlines. Even hostile takeovers, long thought to be an exclusively American phenomena, started becoming more common in Europe. This is underscored by the fact that the biggest deal of all time was the Vodafone–Mannesmann $183 billion hostile takeover. In addition to deals within Europe, trans-Atlantic deals, with European buyers of U.S. companies and vice versa, started to become commonplace. With the development of the European Union and the erosion of nationalistic barriers as the continent moved to a unified market structure with a common currency, companies began to see their market as all of Europe and more. It became clear that a European consolidation was in order. Although there are many indications that there will be realizable benefits from such a consolidation, only time will reveal the magnitude of these benefits.

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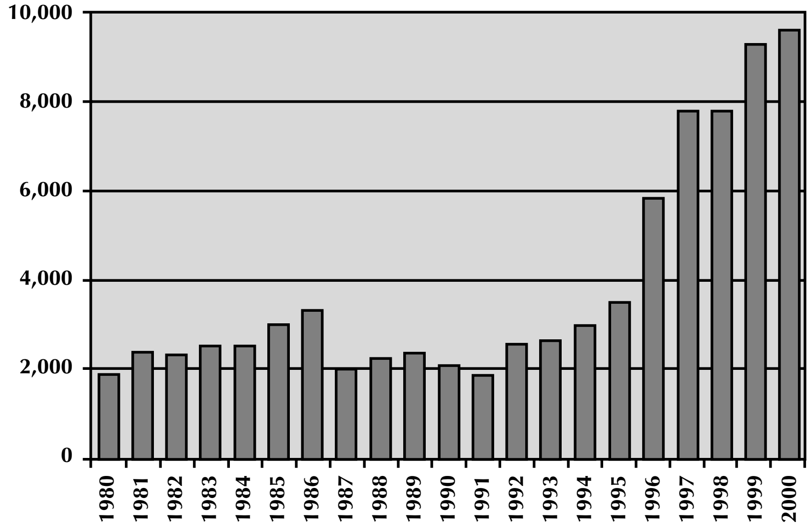

Exhibit 1.1a Merger and Acquisition Transaction, 1980–2000
Source: Mergerstat Review, various years

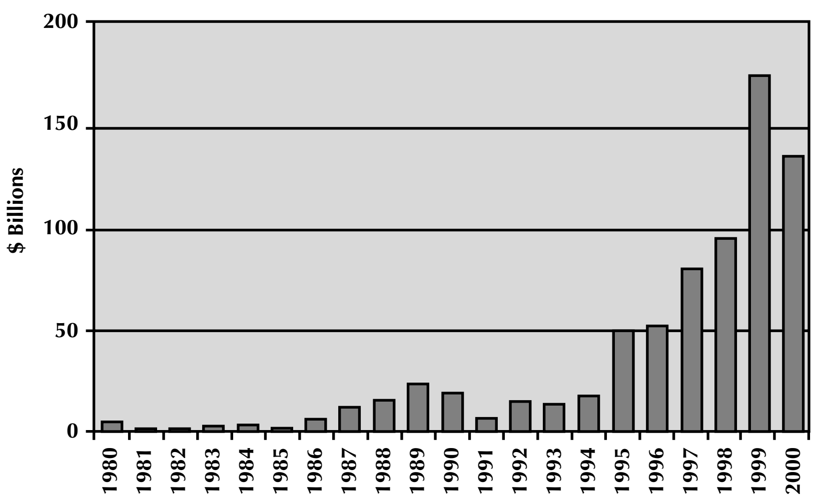

Exhibit 1.1b Dollar Value of U.S. Acquisitions of Foreign Companies, 1980–2000
Source: Mergerstat Review, various years

The main volume of non-U.S. mergers and acquisitions is taking place in Europe, with Asia well behind (see Exhibits 1.2a and 1.2b). However, the fact that corporate restructuring is taking place in nations such as Japan and Korea is reflective of their pressing need to revamp their conservative and poorly performing corporate structures

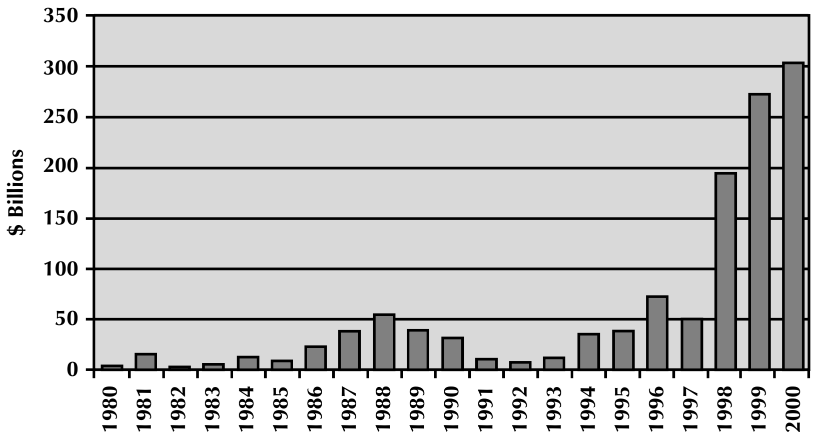

Exhibit 1.2a Dollar Value of Foreign Acquisitions of U.S. Companies, 1980–2000
Source: Mergerstat Review, various years

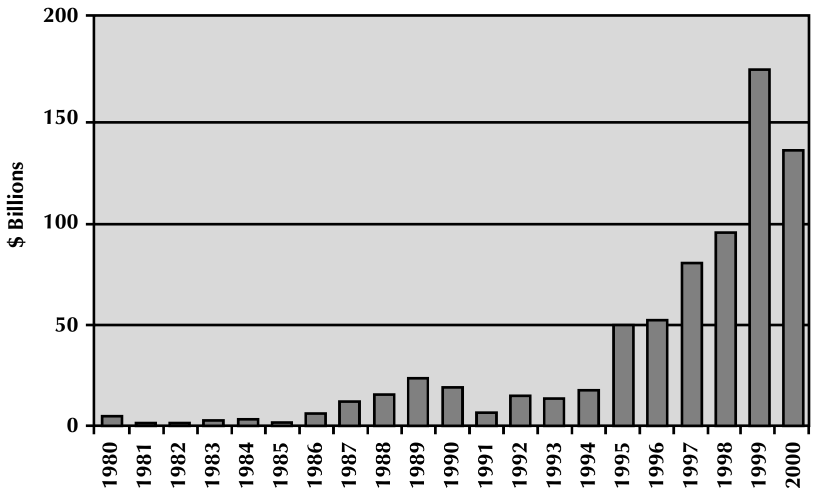

Exhibit 1.2b Dollar Value of U.S. Acquisitions of Foreign Companies, 1980–2000
Source: Mergerstat Review, various years

in light of their prolonged recessions. Due to the continued weak economies in Asia, many companies in Japan and Korea are not looking at acquisitions, but at sell-offs and other forms of restructuring. While this chapter primarily focuses on the U.S. merger market, most of the principles that are discussed also apply to non-U.S. mergers.

Fifth Merger Wave Compared to Prior Merger Periods. The fifth merger wave began in approximately 1993 as the economy began to recover from the 1990-1991 recession. As the economy expanded, firms sought to meet the growing demand in the economy by acquiring or merging with other companies. One of the things that is unusual about the fifth merger wave is that it somewhat closely followed the fourth merger wave, which began in approximately 1984 and ended in 1989. That fourth merger wave was a period characterized by megamergers and many highly leveraged transactions. These highly leveraged transactions often relied upon the financing provided by the junk bond market that grew dramatically in the 1980s, only to collapse at the end of the decade.

The three prior merger waves were at the start of the century, during the boom in the 1920s, and at the end of the 1960s. Each was different from the others. The first merger wave, which occurred between 1897 and 1904, featured a transformation of the American economy from one of many small companies to larger, sometimes monopolistic firms dominating an industry. This period of consolidating acquisitions was ironic in light of the fact that the Sherman Antitrust Act was passed in 1880—less than a decade from the start of the nation's first merger wave. However, there are several reasons for the lack of antitrust enforcement, including the difficulty the courts had in interpreting the broad provisions of the law and the fact that the Justice Department lacked the resources, if not the mindset, to stand in the way of this first great merger wave. This changed with the passage of the Clayton Act in 1914 and the establishment of the Federal Trade Commission in the same year which, along with the Justice Department, enforces antitrust laws.

The second merger wave began in 1916 and continued until the economic downturn in 1929. This wave featured many of the same types of horizontal transactions as the first wave, but also had a good percentage of vertical transactions. It has been said that the first wave was a *mergers toward monopoly* period while the second wave was a *mergers toward oligopoly* period. Like the first wave, it also ended when the market and the economy turned down. This pattern was mirrored again in the third merger, which took place between 1965 and 1969. This wave featured conglomerate acquisitions, which are acquisitions outside of the bidder's own industry. Such deals were partly caused by the fact that bidding companies wanted to expand but were halted by the intense antitrust enforcement that prevailed in the 1950s and 1960s. The only alternative left to expansion-minded companies was to look outside their industry and buy companies that would not be considered in any way a strategic fit by today's standards. Many of these companies paid a price for these nonstrategic deals when they sold off those diversifications in the 1970s and 1980s.

As noted previously, one characteristic of merger waves is that they tend to occur during economic expansions, and they tend to end when the market and the economy slow down. This makes sense in that expansions bring about increasing economic demand, causing companies to look to grow. When the economy slows, companies are not thinking about expansion as much, and mergers play a lesser role in corporate planning. In addition, when the market turns down, deals that could have been financed by stock may become more expensive.

TYPES OF MERGERS, ACQUISITIONS, AND CORPORATE RESTRUCTURINGS

Mergers and acquisitions are usually, but not always, part of an expansion strategy. They can be horizontal deals, in which competitors are combined. The 1998 $77.2 billion merger between Exxon and Mobil is an example of a successful horizontal deal.

They can also be vertical transactions, in which suppliers merge with buyers or distributors. The 1993 $6.6 billion merger between Merck, a pharmaceutical manufacturer, and Medco, a pharmaceutical distributor, is an example of a vertical deal.

Companies may also acquire firms that are in totally different industries. These types of deals are called conglomerate mergers. Daimler Benz's acquisitions in sectors such as the aerospace industry help convert the premium automobile manufacturer into a conglomerate and Europe's largest industrial company. The legacy of such deals is not impressive, but some companies, such as General Electric, have shown some success (at least up to the sizable acquisition of Honeywell).

When companies look to downsize, as opposed to expand, they have several alternatives available to accomplish this. They may simply sell a division through a divestiture. They may also consider a spin-off, such as when AT&T spun off different components of the overall company. When a company does this, shareholders in the original company usually become shareholders in different and separate corporate entities. Another alternative to downsizing is an equity carve-out, which is an issuance of stock in the division that is to be separated from the overall company. A less radical alternative is to issue a tracking stock that will follow the performance of the division in question. When the market is pressuring for a sell off, however, a tracking stock may not be sufficient to meet the demands of the market.

Why Do Firms Merge?

Growth. One of the most common motives for mergers is growth. There are two broad ways a firm can grow. The first is through internal growth. This can be slow and ineffective if a firm is seeking to take advantage of a window of opportunity in which it has a short-term advantage over competitors. The faster alternative is to merge and acquire the necessary resources to achieve competitive goals. Even though bidding firms will pay a premium to acquire resources through mergers, this total cost is not necessarily more expensive than internal growth, in which the firm has to incur all of the costs that the normal trial and error process may impose. While there are exceptions, in the vast majority of cases growth through mergers and acquisitions is significantly faster than through internal means.

Synergy. Another commonly cited motive for mergers is the pursuit of synergistic benefits. This is the new financial math that shows that $2 + 2 = 5$. That is, as the equation shows, the combination of two firms will yield a more valuable entity than the value of the sum of the two firms if they were to stay independent:

$$\text{Value }(A + B) > \text{Value }(A) + \text{Value }(B)$$

Although many merger partners cite synergy as the motive for their transaction, synergistic gains are often hard to realize. There are two types of synergy: that which is derived from cost economies and that which comes from revenue enhancement. Cost economies are the easier of the two to achieve because they often involve eliminating duplicate cost factors such as redundant personnel and overhead. When such synergies are realized, the merged company generally has lower per-unit costs. Many of the consolidating mergers of the fifth merger wave are partially based upon the pursuit of such synergistic economies. Because this is an important part of the fifth merger wave, it is discussed separately in the section that follows this one.

Revenue enhancing synergy is more difficult to predict and to achieve. An example would be where each firm believes that it can sell its products and services to the other firm's customer base. Another example would be a situation where one company's capability, such as research prowess, is combined with another company's capability, such as marketing skills, to significantly increase the combined revenues.

Consolidating and Roll-Up Mergers of the Fifth Merger Wave. One interesting characteristic of the fifth merger wave is the trend toward consolidating, or *roll-up*, mergers. In certain industries, such as the printing and the funeral home industry, leading firms, sometimes called consolidators, acquired competitors across the nation in an effort to build dominant companies. Other industries, such as banking and telecommunications, spurred on by significant changes in the regulatory environment, also saw many such consolidations. Many of these acquisitions were based on the hypothetical pursuit of economies of scale and other such efficiencies. It is clear now, however, that if anything, roll-up companies got less efficient as they pursued deal after deal, not pausing to integrate the companies they had already acquired. In retrospect, it is clear that the roll-up strategy was highly questionable.

Diversification. Other motives for mergers and acquisitions include diversification, whereby companies seek to lower their risk and exposure to certain volatile industry segments by adding other sectors to their corporate umbrella. The track record of diversifying mergers is generally poor with a few notable exceptions. A few firms, such as General Electric, seem to be able to grow and enhance shareholder wealth while diversifying. However, this is the exception rather than the norm. Diversification may be successful, but it seems to need more skills and infrastructure than some firms have.

Related versus Unrelated Diversifications. Not all kinds of diversifications turn out poorly. While research studies show that unrelated diversifications tend to yield poor results, related diversifications, mergers, and acquisitions into a field that is close to the acquiring firm's main line of business tend to have a more impressive track record.[4] Other studies have shown that increased corporate focus tends to be associated with higher share values.[5] This result has intuitive appeal. The lesson from such research tells us that staying with what a company knows best may yield positive results, but straying into businesses that it does not know is an uphill battle that only a select few companies can manage successfully.

Leveraged Transactions. The fourth merger wave featured the introduction of the *leveraged buyout* (LBO). This is a transaction that is financed using a significant amount of debt and often involves taking a public company private. Many of those deals relied upon financing from the junk bond market, which grew dramatically during the fourth wave. Junk bonds, bonds with a Standard and Poors rating of BB or lower, had been around for decades. However, the late 1970s featured the introduction of the original issue junk bonds—bonds that were lower rated right from the date of issuance. A combination of factors, including the willingness of market-makers such as Drexel Burnham

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Lambert to provide liquidity to this market, enabled the junk bond market to grow dramatically in the fourth wave. Unfortunately, many of the highly leveraged deals collapsed when the economy turned down at the end of the decade.

Leveraged transactions continued to be conducted in the fifth merger wave. After a short hiatus, LBOs started to become more common in the 1990s, but there were a number of differences between these deals and those of the fourth merger wave. The transactions tended to be smaller and were a fraction of the size of some of the mega-LBOs, such as the RJR Nabisco $24.6 billion LBO.

ROLE OF INTELLECTUAL PROPERTY IN MERGERS AND ACQUISITIONS

Part of the fuel for the fifth merger wave was provided by the technology sector, where the attraction of merger targets was often their valuable intellectual property. The rapidly evolving high tech sector caused industry participants to rapidly seek out assets, often in the form of intellectual property, so as to keep up with the rapid pace of technological development in their industry. This helps explain why some of the more prolific acquirers of this wave were Cisco and, to a lessor extent, Lucent Technologies. Clearly Cisco accomplished this task better than Lucent. With the collapse of the market values of these companies, the currency they often used to finance acquisitions, their stock, became devalued. This, along with other troubles, led to a significant slowdown in acquisitions in this sector.

HOW DO MERGERS TURN OUT AND WHAT CAN GO WRONG?

As previously noted, certain types of mergers, such as diversifications, tend to yield poor results. Unfortunately, many other acquisitions and mergers yield mediocre results, and some are outright failures. Prominent examples include the Snapple acquisition in which Quaker Oats overpaid and synergies were impossible to find. Others include the recent failed Kroll-O'Gara merger or the various failed deals in the automobile industry, such as the BMW-Rover acquisition or the Daimler Benz acquisition of Fokker and merger with Chrysler. While hindsight is omniscient, it is hard to see how Quaker Oats could justify the high premium it paid in a market that was saturated and showed limited growth potential. The adverse result in the Snapple deal is illustrative of one of the pitfalls of mergers—overpaying. The higher the price that a bidder pays, as a multiple of earnings, the higher growth in earnings that is needed to justify the price. Sometimes bidding contests can cause acquisition prices to rise well above that which can be justified by any reasonable expectation of growth. This is why successful bidders in takeover battles sometimes get inflicted with what is called the *winner's curse*.

Other recent examples include the failed Rite Aid acquisition program. Rite Aid's 1996 $1.4 billion acquisition of the incompatible Thrifty Pay Less chain was one of the factors cited for the firing of the company's chief executive. When a potentially compatible acquisition of Revco was halted by the Federal Trade Commission, the company went to a less favorable choice. Rite Aid also did not anticipate the integration problems it would have following the acquisition. This underscores another pitfall of mergers and acquisitions—post-merger integration. In spite of abundant premerger planning, it is sometimes difficult to predict all of the post-merger integration problems that will occur.

What Can Go Wrong with Intellectual Property Motivated Acquisitions? Deals based upon the acquisition of intellectual property can present their own unique set of challenges. Hard physical assets are often easier to evaluate. For example, a company seeking to acquire the real estate assets of a target company can have those assets appraised individually and come up with an objective valuation. Due to the intangible nature of many intellectual property assets, they are often harder to value. This is particularly true in the rapidly evolving high-technology sector where it is often hard to anticipate both the demand for new products and technologies and the responses by competitors who may be pursuing a similar strategy. The possibility of acquiring intellectual property that may be worth much less or much more than what was originally estimated is greater than the variation that one might expect with more tangible assets. Unfortunately, the rapidly changing nature of some sectors may mean that internal development may be too slow a process and acquisitions may be the only viable route. In such cases, this may simply be a risk that companies have to assume to stay competitive.

Trends in Deal Prices for the Fifth Merger Wave. As deal volume rose to record breaking levels, deal prices also reached new heights (see Exhibit 1.3a). Several factors explain this. For one, the growth of the economy created a situation in which aggressive bidders seeking fast growth bid up the prices of target companies. In addition, the persistent decline in long-term interest rates helped lower discount rates that are used for valuation (see Exhibit 1.3b). Lower discount rates increase the present value of future cash flows and result in higher values of target companies. Between high demand for companies and lower discount rates, values reached unprecedented levels in the late 1990s and in 2000. When the economy slowed in 2001, the pace of deals also slowed with it—consistent with historical experience. This pause notwithstanding, mergers and acquisitions remain a permanent part of many companies' corporate strategy.

Winners and Losers in Mergers and Acquisitions. Various constituents are affected differently by mergers and acquisitions. One natural group to focus on are the sharehold-

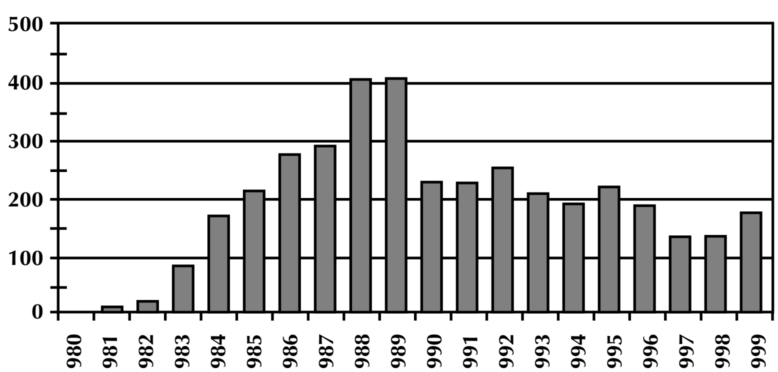

Exhibit 1.3a Number of Leveraged Buyouts, 1980–1999
Source: Thomson Financial Securities Data

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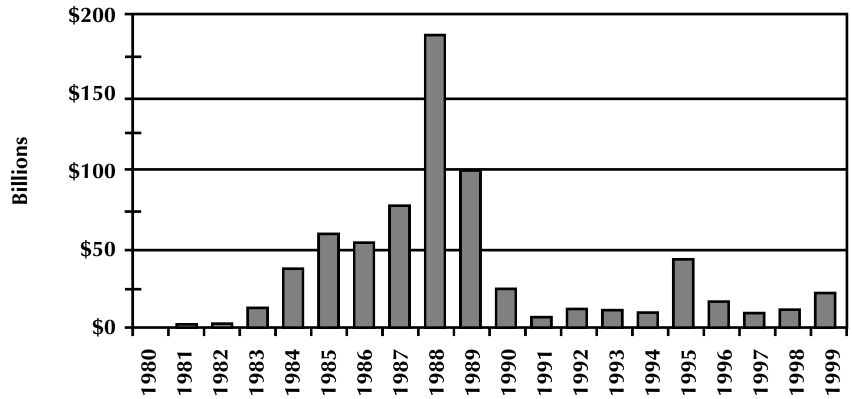

Exhibit 1.3b Dollar Value of Leveraged Buyouts, 1980–1999
Source: Thomson Financial Securities Data

ers of the different companies involved in the deal. The shareholder wealth effects differ based upon whether the deal is friendly or hostile. These effects are summarized as follows:[6]

1. *Target shareholders earn positive returns from merger agreements.* Several studies have shown that for friendly, negotiated bids, target common shareholders earn statistically significant positive abnormal returns.[7] These returns are a function of the premiums that target shareholders receive.
2. *Target shareholders may earn even higher significant positive returns from tender offers.* Target common shareholders of hostile bids which are tender offers also receive statistically significant positive returns.[8] The hostile bidding process may create a competitive environment which may increase the acquiring firm's bid and cause target shareholder returns to be even higher than what would have occurred in a friendly transaction.
3. *Target bondholders and preferred stockholders gain from takeovers.* Both target-preferred stockholders and bondholders gain from being acquired.[9] Given that bidders tend to be larger than targets, the addition of the bidder as another source of protection should lower the risk of preferred stocks and bonds, making them more valuable. Thus, like the target common shareholder effects, this is an intuitive conclusion.
4. *Acquiring firm shareholders tend to earn zero or negative returns from mergers.* Acquiring firm stockholders tend not to do well when their companies engage in acquisitions.[10] These effects are either statistically insignificant or somewhat negative. Presumably, this reflects that markets are skeptical that the bidder can enjoy synergistic gains, which more than offset the fact that it is paying a premium for the target. The fact that the bidder's stock response is small compared to that of the target is due to the fact that bidders tend to be larger than targets.[11]

5. *Acquiring firm shareholders tend to gain little or no returns from tender offers.* Acquiring firm shareholders also tend not to do well when their firm takes over a target through a hostile bid. There is some evidence that there may be a response that ranges from either mildly positive to zero.

Effects of Sell Offs. Sell offs are the opposite of mergers. They are a form of downsizing and are often a result of a determination that a prior acquisition did not work out satisfactorily. These sell offs can come in various forms, such as through a straight *divestiture* where a company simply sells off a division to a buyer. Other possibilities include a spin-off, which is when a new company is formed and shareholders in the original company become shareholders in both the original firm (which is smaller as a result of the spin-off) and the newly formed company. Another alternative is to do an equity carve-out involving a public offering of stock in a newly formed company, which is the division being separated from the parent company.

Exhibit 1.4 shows that the shareholder wealth effects of sell offs are positive. It can be seen from Exhibit 1.4 that numerous research studies, covering an extended period of time, show that the decision of a parent company to sell off a division has a positive effect on the parent company. It seems to imply that the market believes that the division had a negative effect on the overall company, and separating the division from the parent company should increase shareholder value. This is due to the fact that resources would not have to be diverted to the division, as well as the fact that the parent company would receive payment in exchange for its interest in the division.

Study	Days	Average Abnormal Returns (%)	Period Sampled	Sample Size
Alexander, Benson, and Kampmeyer (1984)	–1 through 0	0.17	1964–73	53
Hite and Owers (1984)	–1 through 0	1.50	1963–79	56
Hite, Owers & Rogers (1987)	–50 through –5	0.69	1963–81	55
Jain (1985)	–5 through –1	0.70	1976–78	1, 107
Klein (1983)	–2 through 0	1.12	1970–79	202
Linn and Rozeff (1984)	–1 through 0	1.45	1977–82	77
Loh, Bezjak & Toms (1995);	–1 through 0	1.50	1982–87	59
Rosenfeld (1984)	–1 through 0	2.33	1963–81	62

Exhibit 1.4 Average Stock Price Effects of Voluntary Sell-Offs[12]
Source: Patrick A. Gaughan, *Mergers, Acquisitions, and Corporate Restructurings,* 2nd ed. (New York: John Wiley & Sons, 1999), 413.

CONCLUSION

The merger and acquisition business continued to grow in the year 2000. The economic growth of the 1980s and 1990s has fueled two major merger waves in the United States. The most recent merger wave, the fifth in U.S. history, spread to Europe as the continent was enjoying economic growth. This growth, combined with the economic impact of the European Union and deregulation, helped the fifth merger wave in the United States spread to Europe. It is unknown how these fifth-wave deals will turn out. It is hoped that deal makers learned from the mistakes of prior merger periods and crafted deals that will not be as susceptible to the flaws of past transactions. However, one can be sure that the fifth wave will have brought its share of failures.

ENDNOTES

[1] Many of the topics that are briefly introduced in this chapter are discussed at length in Patrick A. Gaughan, *Mergers, Acquisitions, and Corporate Restructurings,* 2nd ed. (New York: John Wiley & Sons, 1999).

[2] Patrick A. Gaughan, *Mergers, Acquisitions, and Corporate Restructurings*, 2nd ed. (New York: John Wiley & Sons, 1999), 21–60.

[3] Patrick A. Gaughan, "Mergers and Acquisitions in the 1990s: A Record Breaking Decade," *Journal of Corporate Accounting & Finance* 11, no. 2 (January/February 2000): 3–5.

[4] P.G. Berger and E. Ofek, "Diversification's Effect on Firm Value," *Journal of Financial Economics* 37, no. 1 (January 1995): 3965.

[5] R. Comment and G. Jarrell, "Corporate Focus and Stock Returns," *Journal of Financial Economics* 37, no. 1 (January 1995): 67–87.

[6] This section is taken from Patrick A. Gaughan, *Mergers, Acquisitions, and Corporate Restructurings,* 2nd ed. (New York: John Wiley & Sons 1999), 522–525.

[7] Debra K. Dennis and John J. McConnell, "Corporate Mergers and Security Returns," *Journal of Financial Economics* 16 (2), (June 1986): 143–187. Paul Asquith, "Merger Bids, Uncertainty and Stockholder Returns," *Journal of Financial Economics* 11 April 1983: 51–83; Paul Asquith and E. Han Kim, "The Impact of Merger Bids on Participating Firm's Security Holders," *Journal of Finance*, 37, (1982), 121–139; Peter Dodd, "Merger Proposals, Management Discretion and Shareholder Wealth," *Journal of Financial Economics* 8 (1980): 105–138.

[8] Michael Bradley, Anand Desai, and E. Han Kim, "The Rationale Behind Interfirm Tender Offers," *Journal of Financial Economics* 11 (1–4), (April 1983): 183–206.

[9] Debra K. Dennis and John J. McConnell, "Corporate Mergers and Security Returns," *Journal of Financial Economics* 16 (2) (June 1986): 143–187.

[10] Paul H. Malatesta, "The Wealth Effect of Merger Activity and the Objective Functions of Merging Firms," *Journal of Financial Economics* 11 (1–4), (April 1983): 155–182; Nikhil P. Varaiya, "An Empirical Investigation of the Bidding Firm's Gains from Corporate Takeovers," *Research in Finance* 6 (1986): 149–178.

[11] Michael Jensen and Richard Ruback, "The Market for Corporate Control: The Scientific Evidence," *Journal of Financial Economics* 11 (1–4) (April 1983): 5–50.

[12] Gailen Hite, James Owers, and Ronald Rogers, "The Market for Interfirm Asset Sales: Particial Sell offs and Total Liquidations," *Journal of Financial Economics* 18, no. 2 (June 1987); Prem C. Jain, "Sell-Off Announcements and Shareholder Wealth," *Journal of Finance* 40, no. 1 (March 1985); Scott C. Linn and Michael S. Rozeff, "The Corporate Sell Off," *Midland Corporate Finance Journal* 2, no. 2 (Summer 1984); Charmen Loh, Jennifer Russell Bezjak, and Harrison Toms, "Voluntary Corporate Divestitures as Antitakeover Mechanism," *The Financial Review* 30, no. 1 (February 1995).