

# 1 Understanding mergers and acquisitions: activity since 1990

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## Abstract

This chapter discusses the trends in international market for corporate control. Each mergers and acquisitions (M&A) wave has been characterized by a different set of underlying triggers. However, we consistently find that takeovers early in the wave are triggered by industry shocks. Takeovers are more likely to occur during periods of economic recovery, and the takeover market may be driven by regulatory changes as well as by industrial and technological shocks. Managers' personal goals may have further impact on takeover activity: We find that managerial hubris and herding behavior tend to increase during takeover waves, often leading to inefficient acquisitions. Finally, takeover activity usually collapses alongside a market decline and an economic recession. The chapter also positions the papers of this book in the international literature.

## 1.1 Introduction

Understanding the drivers of mergers and acquisitions means understanding their cyclical nature (see Golbe and White, 1993, for one of the earliest documentations of this phenomenon). It is commonly accepted that there have been five waves of major merger activity: the 1890s, the 1920s, the 1960s, the 1980s, and the 1990s. The scale of the final wave is remarkable for its breadth and geographic distribution. This wave saw tremendous U.S. M&A growth, but it was also witness to soaring levels of European M&A activity, as firms started to partner actively with U.S. and U.K. firms.

M&A activity has been on the rise again since June 2003, perhaps suggesting a new wave. This recent increase in takeover activity could have wide-ranging ramifications and raises many interesting questions. We briefly review the historical and recent literature on M&A activity by wave for the U.S., U.K. and Continental Europe. We find that takeover activity is often triggered by excessive heterogeneity, generally ending with some type of economic shock such as a recession. Economic recovery seems to drive takeover waves, which often coincide with periods of rapid credit expansion. Regulatory changes are also important drivers of takeover waves. The earlier waves of the 1890s and 1920s are believed to have been driven by antitrust legislation, while that of the 1980s appears to have been brought on by widespread market deregulation (Martynova and Renneboog, 2005).

## **1.2 Historical background**

### ***1.2.1 The 1890s and the 1910s to the 1920s: the first and second waves***

The first wave of mergers in the 1890s was generated by an economic depression, legislation governing incorporation, and the rise of industrial stocks (see, e.g., O'Brien, 1988). The main goal of this first wave was to consolidate industrial production and reduce competition (Lamoreaux, 1985). This wave led to the creation of companies that became virtual monopolies in their respective industries. The equity market crash caused this first wave to come to an end around 1905. M&A activity stayed at moderate levels from then until the late 1910s, largely owing to World War I. Around 1910, antitrust legislation began to take hold both in the U.S. and Europe, probably as a result of the previous monopolization attempts. The only option for firms desiring to expand was vertical expansion; thus this second wave can be seen as creating oligopolistic structures (see Stigler, 1950). The resulting conglomerates of the 1920s focused on economies of scale (for detailed studies of the first and second merger waves, see, e.g., Eis, 1969, Markham, 1955, and Thorp, 1941).

### ***1.2.2 The 1950s to the 1970s: the third wave***

Several decades passed before the advent of a new takeover wave, largely owing to the economic depression of the 1930s and World War II. The third M&A wave is widely accepted to have taken off during the 1950s and to have come to an end in 1973 as a result of the oil crisis and subsequent recession. As Sudarsanam (2003) notes, here we see a difference between U.S. and U.K. takeover activity: Whereas U.S. takeovers focused on creating large conglomerates, the hallmark of U.K. takeovers at this time was horizontal integration (see Fairburn, 1989, for a more detailed discussion). It is notable, however, that the beginning of this third M&A wave in the U.S. coincided with tighter antitrust regulations—regulations that not only made horizontal expansion more difficult, but caused more firms to combine with those outside their industries. As Matsusaka (1996) notes, though, some countries that did not have such tough antitrust policies, such as Canada, Germany, and France, also saw a wave of diversification during the 1960s. It is likely that, during this time, companies were beginning to search more actively for opportunities to boost value and reduce earnings volatility.

There is more than one plausible explanation for the rise of the third M&A wave. Diversifications during the 1960s can be attributed to such assorted causes as stricter antitrust regulations, less well developed external capital markets, and labor inefficiencies, as well as a host of economic, social, and technological changes (for additional explanations of the motives behind this third takeover wave, see, e.g., Lintner, 1971, Markham, 1973, and Reid, 1968).

### **1.2.3 *The 1980s: the fourth wave***

The fourth takeover wave is widely accepted to have ranged from 1980, at which time the stock market had regained its footing after the economic recession, through 1989. It was a time of antitrust policy changes, financial services deregulation, new financial instruments and markets, and increased technological progress. There were also a record number of divestitures, hostile takeovers, and transactions such as leveraged buyouts (LBOs), suggesting increased investor focus on corporate control (Renneboog and Simons, 2006; Renneboog, Simons and Wright, 2007).

This fourth takeover wave appears to have emerged as a result of the inefficiencies created by the previous wave's diversifications (Bhagat, Shleifer, and Vishny, 1990; and Shleifer and Vishny, 1991). The hallmarks of this wave included loosened antitrust regulations, more competitive capital markets, and improved shareholder control. Companies began to see the benefits of "de-diversifying" and refocusing on core business ideals (Blair, 1993). This decade also saw the rise of hostile raiders, who were always ready to swoop in and pick off slower, less efficient companies.

Some authors believe that the outside capital markets had also become more efficient, owing to the host of economic, technological, and regulatory changes seen during the 1980s (Martynova and Renneboog, 2006a). This may have begun to render internal capital markets less necessary (Bhide, 1990). But the structure of the conglomerate was also starting to be seen as inefficient. Its size meant it was slow to react to shocks caused by deregulation, political events, or economic factors (Mitchell and Mulherin, 1996; see also Jensen, 1986 and 1993; Morck, Shleifer, and Vishny, 1988; and Andrade and Stafford, 2004).

For example, in the medical and pharmaceuticals sectors, the introduction of a new reimbursement policy in 1983 triggered a wave of takeover activity aiming to take advantage of potential cost reductions. In the oil sector, political events such as the 1973 OPEC embargo set off a wave of corporate restructuring. And in food processing, low population growth during the 1980s drove a wave of restructuring.

To conclude, the drivers of the takeover wave of the 1980s include industrial shocks, the reining in of managerial power, and the trend toward smaller, more nimble companies. Activity at this time was driven further by more and stricter disclosure of corporate information and the subsequent focus on maximizing shareholder value.

## **1.3 Recent M&A activity**

### **1.3.1 *The 1990s: the fifth wave***

It is commonly accepted that the fifth takeover wave, unprecedented in both deal value and deal volume, began in 1993. It also took off alongside an economic bull

market, then collapsed in 2000, a victim of the equity market downturn that year. The United States had approximately 119,000 M&A deals during this wave, and Europe had 117,000 (these data come from the Thomson Financial Securities Database). In comparison, the fourth wave had only 34,000 and 13,000, respectively, in the United States and Europe. But the fifth wave dwarfs the fourth wave in other ways: Total (global) value reached USD 20 trillion, more than five times the total of the fourth wave (Martynova and Renneboog, 2006 a,b).

The fifth takeover wave saw dramatically more activity abroad as well. In fact, during this period, the European wave was almost as large as the U.S. wave, and a substantial takeover market emerged in Asia. Many M&As conducted during this fifth wave were cross-border transactions, reflecting the increase in capital market globalization. Stronger competition from abroad meant that U.S. companies needed to consider takeovers in other countries just to survive.

The increase in deregulation and privatization during this period tended to trigger cross-border acquisitions in sectors such as finance and telecoms. According to the Thomson Database, M&A activity during the fifth wave, whether cross-border or domestic, occurred primarily intra-industry. The proportion of M&A divestitures, although still relatively high, was decreasing. This indicates that the main takeover motive during the 1990s wave was growth, which was necessary to participate in global markets.

But to expand, companies need financing, and they may choose to issue equity or debt to get it. Thus we see a relationship between the bull market of the 1990s and the widespread use of equity in M&A deals (see Shleifer and Vishny, 2003). Bidders used equity to buy assets of undervalued companies. We suggest that the mispricing premium was an important source of M&A value during this period. The corporate bond market also grew tremendously during this period. The higher amount of activity during this wave may also have been driven by lower interest rates and easier credit terms (Renneboog and Szilagyi, 2007).

Note that the number of hostile bids in the United Kingdom and the United States fell dramatically during the 1990s compared to the 1980s, according to the Thomson Database. This decline may be attributable to the bull market: Target shareholders have been shown to be more receptive to takeover bids when their shares are overvalued (Martynova and Renneboog, 2006b).

Regulatory changes during the 1980s are also responsible for the decrease in hostile takeovers. Strict anti-takeover laws were enacted at this time in some states. And Holmström and Kaplan (2001) put forth another reason: the rise of alternative governance mechanisms, such as stock options and shareholder activism, which may mean that hostile takeovers are no longer the preferred means of policing management behavior. Note that, interestingly, hostile takeover activity in continental Europe increased during the 1990s. In fact, it began to be seen even in countries with no history of hostile takeovers.

In sum, the fifth wave of M&A activity was driven by a wide range of factors, with globalization playing perhaps the largest part, followed by technological innovation, the financial bull market, deregulation, and privatization. Many articles posit that takeovers at that time were mainly concerned with

cost-cutting, expansion overseas, and exploiting over- or undervaluations. Goergen, Martynova, and Renneboog (2005) discuss the impact of regulation on M&A activity. But several important empirical studies have shown that M&A deals undertaken in the late 1990s may have actually destroyed value (e.g., Moeller, Schlingemann, and Stulz, 2005).

### **1.3.2 From 2003: the sixth wave?**

Because takeover activity has been increasing since 2003 in the United States, Europe, and Asia, we may be seeing what will become a sixth wave. As with the other waves, this wave seems to have been triggered by the market recovery after the 2000 downturn. According to the Thomson Database, M&A volume saw a 71% increase in 2004, for a total of about USD 1 trillion, compared to 2002 when it totaled about USD 500 billion. A similar trend has been seen in Europe. In 2004, total takeover value was approximately U.S. USD 760 billion, up from USD 517 billion in 2002. In fact, cross-border acquisitions from 2002 through mid-2005 account for more than 43% of the total value of all European M&A' and 13% of the total value of all U.S. M&A'. In China, the numbers have also increased dramatically, from about U.S. USD 3 billion in 2002 to almost USD 19 billion in the first half of 2005.

We cannot draw conclusions yet about the drivers of any new wave, but some things are apparent. First, the events of September 11, 2001, are believed to have played a large part, causing a delay in certain transactions that are now coming to fruition. Second, there has been an increase in governments' selling shares in major national companies, thus increasing the supply of target firms (this is especially true in China). Third, firms afloat with cash from the recent bull market seem to be seeking to expand into new markets. And, fourth, private equity investments in sectors like real estate and retail, have escalated dramatically recently (Wright, Renneboog, Scholes, and Simons, 2006).

## **1.4 M&A clustering: theory**

We now briefly discuss the theoretical models behind the motives for takeovers. There are three main groups: (1) neoclassical models, which suggest that takeover waves emerge from industrial, economic, political, or regulatory shocks; (2) models proposing that takeover clustering is driven by the self-interest of managers, e.g., herding, hubris, or agency problems; and (3) models attributing takeovers to general capital market development, thereby positing that waves occur as a result of managerial market timing.

### **1.4.1 Neoclassical models**

Neoclassical models revolve around the rational economic factors that motivate firms to restructure simultaneously. Coase (1937) was an early proponent of the

model suggesting that takeover activity is driven by technological change. A later model by Gort (1969) claims that economic disturbances, such as market disequilibrium, may cause wholesale industry restructuring. Jovanovic and Rousseau (2001, 2002) built on Gort's theory, and developed the Q-theory of takeovers, which posits that economic and technological changes cause a higher degree of corporate growth opportunities. Such changes may cause capital to be reallocated to more productive and efficient firms.

Some authors explain takeover activity by citing the relationship between industry-specific shocks and the availability of low-cost capital. Harford's (1999) model predicts that M&As are more likely to occur when companies have large cash reserves or less access to external financing (see Martynova and Renneboog, 2006b, for empirical evidence). Thus takeover clustering occurs in periods of capital market growth. Neoclassical models explain takeover clustering by industry and by country. But waves can also result from firms' responding to the actions of their competitors. Thus, if one firm conducts a series of successful M&As, this may increase the resolve of other firms, especially in the same industry, to follow suit (Persons and Warther, 1997).

#### ***1.4.2 Models of managerial hubris, herding, and agency problem***

As we see in the empirical literature, a significant percentage of M&As may be considered to have destroyed rather than added value. Thus some theoretical models focus on facets of managerial decision-making to explain this phenomenon. Jensen's (1986, 2004) agency explanation cites overcapacity generated by industrial shocks or financial bull markets. Roll (1986) focuses on managerial hubris, positing that overconfident managers overestimate the creation of synergistic value.

The hubris and herding hypotheses may provide additional explanations for the cyclical nature of M&A activity (examples of financial herding models are cited in Scharfstein and Stein, 1990; Graham, 1999; Boot, Milbourn, and Thakor, 1999; and Devenow and Welch, 1996). Herding refers to firms' imitating the actions of a leader or a first-mover firm. Thus successful takeovers may encourage other companies to try for similar transactions. However, the other companies may not be acting from clear economic foundations; hence their takeovers may not result in the same efficiency. Thus herding combined with hubris may mean that inefficient takeovers are more likely to follow efficient ones. Note that there is also a behavioral explanation for takeover waves, as suggested by Auster and Sirower (2002). They put forth three distinct stages of a takeover wave: development, diffusion, and dissipation. The way a wave develops is determined by macro factors and the competitiveness of the environment. They hypothesize that if M&A activity does not result in positive economic outcomes, market forces will cause it to decline rapidly.

An alternative view put forth by Gorton, Kahl, and Rosen (2000) shows that value-destroying takeovers can also precede profitable ones. These authors posit that managers will always prefer to keep their firms independent, and may

actively take over other firms as a defense against being taken over themselves. If managers believe they are in danger of being taken over, this fear may result in a wave of inefficient takeover activity.

### **1.4.3 Models of managerial market timing**

Models seen in more recent articles posit that takeover waves arise from managerial market timing. Following Myers and Majluf (1984), these models hypothesize that managers may use equity overvaluations to acquire real assets. But takeover waves may also occur because financial bull markets tend to overvalue stocks in the short run (Shleifer and Vishny, 2003). Overvaluation can vary significantly from company to company, so a bidding firm can actually purchase the assets of a less overvalued firm by using their own (overvalued) equity (in other words, this is an example of the mispricing premium). The assumption here is that target managers will maximize their own short-term benefits and will accept an all-equity bid, even at the expense of target shareholders. Following the predictions of this model, takeover waves are seen as positive for stock market value because managers can take advantage of temporary market inefficiencies.

## **1.5 Empirical evidence on M&A profitability**

The empirical literature on M&A profitability is extensive. Several surveys provide useful overviews (see Jensen and Ruback, 1983; Jarrell, Brickley, and Netter, 1988; Sudarsanam, 2003; Martynova and Renneboog, 2005). There are many ways to assess the success of a takeover. We can evaluate M&As either from the perspective of the target's shareholders or the bidder's shareholders, or we can calculate the combined shareholder effect.

Event studies are the predominant approach for analyzing short-term shareholder wealth effects. The pivotal point in the event study approach is that the M&A announcement constitutes new market information, and that investor expectations will be updated immediately and reflected in the share price. The difference between the realized returns and a benchmark return would equal an abnormal return if the takeover bid did not take place. The benchmarks that are commonly calculated use asset pricing models like the market model.

Some studies also calculate the operating performance of the merging firms by comparing measures like net income, sales, and return on assets or equity before and after the takeover. However, because operating performance is also affected by a variety of other factors, this approach has limitations. To compensate, the literature suggests adjusting for the performance of merging firms for industry trends as well as for size and book-to-market ratios of nonmerging companies, such that the question of whether or not merging companies outperform nonmerging ones before and after the bid can be answered effectively.

## 1.6 Short-term wealth effects

According to the empirical literature, takeovers create value for the target and bidder shareholders combined (with the target shareholders reaping the majority of the gains). But the results for the bidder shareholders are mixed: Some gain small positive abnormal returns; others suffer small losses. See Table 1.1 for an overview.

## 1.7 Total takeover gains

As Table 1.1 shows, takeovers on average are expected to increase the value of the combined firms' assets. The target shareholders tend to earn large positive abnormal returns, and the bidder shareholders are not likely to lose value. An interesting study by Bradley, Desai, and Kim (1988) found an abnormal return of 7–8% over the period 1963–1984 accruing to an investor who, having owned an equal share in both the bidder and the target one week before the event date, then sold the shares one week later.

For the period 1985–2000, Bhagat, Dong, Hirshleifer, and Noah (2004) found a decrease in total takeover gains over this period compared to previous decades. Bhagat Dong, Hirshleifer, and Noah (2004) and Harford (2003) found that total announcement wealth effects of M&As from periods outside the takeover waves are always significantly lower than gains earned during waves. Interestingly, both studies also found that the highest combined M&A gains come at the beginning of takeover waves.

## 1.8 Operating performance

To gauge the combined gains of takeovers, 25 major accounting studies have been conducted. Post-merger, 14 studies found a decline in the profitability of merging firms, 6 studies found firm profitability to be changed insignificantly, and 5 found a significantly positive increase in operating returns (see, e.g., Ravenscraft and Scherer, 1987; Linn and Switzer, 2001; and Carline, Linn, and Yadav, 2002).

But if we consider post-merger corporate growth, the results are less clear. Cosh, Hughes, and Singh (1980) found that post-merger asset growth of U.K. companies that conducted M&As from 1967 to 1969 improved systematically. Mueller (1980) found a significant decline in the growth rate of U.S. companies during the third wave. Ghosh (2001), however, finds no statistically significant changes in the growth rate of U.S. companies for the period of the fourth wave. Note that measurement errors and statistical problems may arise in post-merger operating performance studies (similar to those found for long-term wealth-effect studies). It may not be meaningful, therefore, to compare results across

Table 1.1 M&A announcements—short-term effects

Study (sample country)	Sample period	Benchmark return model	Event Window (days)	Sample size: T/B/C	Type of M&A	CARs target, %	CARs bidder, %	CARs combined, %
<i>Panel A: Third takeover wave, 1950s–1973</i>								
Asquith, 1983 (U.S.)	1962–1976	B MCP	(-2, 0) (-20, 0)	211/196 211/196	M	+6.20 <sup>a</sup> +13.30 <sup>a</sup>	+0.20 +0.20	
Eckbö, 1983 (U.S.)	1963–1978	MM	(-1, +1) (-20, +10)	57/102 57/102	HM	+6.24 <sup>a</sup> +14.08 <sup>a</sup>	+0.07 +1.58	
Franks, Broyles, and Hecht, 1977 (U.K.)	1955–1972	MM, TTA	(0, +20)	70	M	+16.0*	+4.60*	+8.60*
Eckbö and Langohr, 1989 (France)	1966–1982	MM	(0, +5)	90/52	TO–Public	+16.48 <sup>a</sup>	-0.29	
<i>Panel B: Fourth takeover wave, 1981–1989</i>								
Morck, Shleifer, and Vishny, 1990 (U.S.)	1975–1987 1975–1979 1980–1987 1975–1979 1980–1987	EV/PA	(-2, +1)	326 34 57 120 115	All MA RMA RMA UMA UMA		-0.70 +1.54 +2.88 +0.23 -4.09 <sup>b</sup>	
Byrd and Hickman, 1992 (U.S.)	1980–1987	MM	(-1, 0)	128	TO		-1.23	
Franks and Mayer, 1996 (U.K.)	1985–1986	MAM	(0, +20)	34 32	FA HA	+18.44 <sup>a</sup> +29.76 <sup>a</sup>		
Doukas, Holmen, and Travlos, 2001 (Sweden)	1980–1995	MM	(-5, +5)	46 46	RMA UMA		+2.74 <sup>a</sup> -2.37 <sup>c</sup>	

(continued)

Table 1.1 (continued)

Study (sample country)	Sample period	Benchmark return model	Event Window (days)	Sample size: T/B/C	Type of M&A	CARs target, %	CARs bidder, %	CARs combined, %
Kang, Shivdasani, and Yamada, 2000 (Japan)	1977–1993	MM	(-5, +5)	154	All MA		+2.22 <sup>a</sup>	
			(-1, 0)	104	RMA		+1.4 <sup>b</sup>	
			(-1, 0)	50	UMA		+0.8	
			(-1, 0)	95	Stock		+1.0 <sup>b</sup>	
			(-1, 0)	59	Mixed		+1.4 <sup>c</sup>	
<i>Panel C: Fifth takeover wave, 1993–2001</i> Mulherin and Boone, 2000 (U.S.)	1990–1999	MAM	(-1, +1)	376/281/281	MA–Public	+21.2 <sup>a</sup>	-0.37	+3.56 <sup>a</sup>
			(-1, +1) (+2, +40)	519	All deals		-1.39 <sup>a</sup>	+0.14
Sudarsanam and Mahate, 2003 (U.K.)	1983–1995	4 methods, results are for MAM	(-2, +2)	40/41	M	+12.62 <sup>a</sup>	+4.35 <sup>a</sup>	
				53/55	FA	+11.33 <sup>a</sup>	+1.94 <sup>a</sup>	
Goergen and Renneboog, 2004 (Europe)	1993–2001	6 methods, results are for MM (TTA)		28/32	HA	+17.95 <sup>a</sup>	-3.43 <sup>a</sup>	
				88/86	Cash	+13.56 <sup>a</sup>	+0.90 <sup>c</sup>	
				30/33	Stock	+11.38 <sup>a</sup>	+2.57 <sup>a</sup>	
				18/23	Mixed	+13.24 <sup>a</sup>	+0.22	

van Schaik and Streenbeek, 2004 (Japan)	1993–2003	MM	(-1, +1)	136	All deals	+0.57
Bae, Kang, and Kim, 2002 (Korea)	1981–1997	MM	(-5, +5)	107	M all	+2.666 <sup>b</sup>
				66	RM	+3.904 <sup>a</sup>
				41	UM	+0.672
Martynova and Renneboog, 2006b (Europe)	1993–2001	6 methods, Results are for MM (TTA)	(-5, +5)	259/1659	M	+6.25 <sup>a</sup>
				380/329	FA	+20.19 <sup>a</sup>
				123/120	HA	+22.36 <sup>a</sup>
				405/754	Cash	+20.17 <sup>a</sup>
				185/285	Stock	+11.10 <sup>a</sup>
				92/412	Mixed	+17.48 <sup>a</sup>
				525/1334	RMA	+15.16 <sup>a</sup>
234/774	UMA	+17.36 <sup>a</sup>				

Source: Martynova and Renneboog (2005).

*Types of M&A:* TO = tender offer; M = merger; MA = M&A = horizontal M&A; VMA = vertical M&A; RMA = related M&A (nonglomerate); UMA = unrelated M&A (conglomerate or diversification); A = acquisition; FA = friendly acquisition; HA = hostile acquisition; stock = all-stock offer; cash = all-cash offer; mixed = combination of stock and cash offer; public (pub) = target company is public; private (priv) = target company is private.

*Benchmark return models:* MM = market model; MAM = market-adjusted model; CAPM = capital asset pricing model; BMCP = beta-matched control portfolio (CRSP); FFM = Fama-French model; VPE = valuation prediction error; PSM = probability scaling method; TTA = thin trade-adjusted; EV/PA = ratio of change in bidder equity value to acquisition price; SBM = size and book-to-market ratio-matched portfolio. Close is the date the target was delisted from public trading. *Sample size:* T/B/C = number of observations for target firms/bidding firms/combined firms, respectively. If the three samples have the same number of observations, only one number is reported.

\*Significance is not reported, a/b/c = statistical significance at 1%/5%/10% levels, respectively.

countries and merger waves. Results may also be affected by accounting standard changes and country variations, and even by noise in the accounting data.

## **1.9 Conclusion and overview of the research presented in this volume**

Each M&A wave has been characterized by a different set of underlying triggers. However, we consistently find that takeovers early in the wave are triggered by industry shocks. Takeovers are more likely to occur during periods of economic recovery, and the takeover market may be driven by regulatory changes as well as by industrial and technological shocks. Managers' personal goals may further affect takeover activity. We find that managerial hubris and herding behavior tend to increase during takeover waves, often leading to inefficient acquisitions. Finally, takeover activity usually collapses alongside a market decline and an economic recession.

Most M&As improve efficiency and generate substantial share price increases at the announcement, most of which will accrue to the target shareholders. It is possible that heterogeneity in takeover wave triggers may account for differences in M&A patterns and profitability across decades. Different types of shocks, whether economic or technological, have different impacts on corporate profitability and hence on any gains. Thus understanding whether takeovers will create or destroy value requires an understanding of why and when merger waves occur.

The literature on M&As leaves a number of questions on takeovers unanswered. Issues such as cross-border mergers and acquisitions merit more comprehensive theoretical and empirical analysis. It is also important to determine how differences in corporate law, governance, and accounting quality influence cross-border acquisitions (see Volume 2). Noneconomic factors, such as manager compensation, education, and even social networks, may also play large roles in takeover decisions and thus need a great deal of further explication. This volume intends to close this gap partially.

Section 1 of this volume describes the expected and long-term performance of firms involved in mergers and acquisitions (M&As) as well as how the market for corporate control has evolved over the past 15 years. Brakman, Garretsen and van Marrewijk collect a very large dataset on cross-border merger and acquisitions in order to analyze empirically the properties of cross-border M&As regarding country characteristics, regional composition, gross and net flows, size, and inequality.

In Chapter 2, Brakman, Garretsen, and van Marrewijk discuss established and new theories on foreign direct investments and the extent to which these may be helpful for understanding the facts. The authors provide an overview of M&A deals for virtually all countries throughout the world over the period 1986–2005. About 50% of cross-border M&As appear to be horizontal activities

deals. Most acquirers are public firms, and the largest proportion of targets are subsidiaries. In most cases, the M&A is completely paid for in cash and leads to complete ownership of the target firm. The largest acquirers and targets are still those based in the OECD countries, particularly in Western Europe and North America. When Brakman, Garretsen, and van Marrewijk divide the world into nine “global regions,” they find that about half of all inter-regional M&As occur between Western Europe and North America. The third-largest flows are those from Western to Eastern Europe. Using Gini coefficients, they document that the tendency of inequality to change over time and the change in inequality are strongly correlated with merger waves. In a nutshell, they assert that (1) most FDI is in the form of cross-border M&As; (2) firms engaged in cross-border M&As seem to be “market-seeking”; (3) cross-border M&As come in waves (the most recent wave is still unfolding); (4) economic integration (international deregulation) has stimulated M&As; and (5) both the size of and the inequality between M&As grows over time which is strongly correlated with the wave phenomenon.

In Chapter 3, Liodakis and Pang search for the alpha. They investigate which acquisitions create value and show that, although the typical acquirer underperforms the market in the long term, not all acquisitions destroy value. The authors search for factors that could help investors screen for value-enhancing acquirers. For instance, cash-financed deals within the same industry that involve relatively large targets enjoy better fortunes, and bidders that trade at a valuation discount to their sector typically do better. The bid premium and the short-term market reaction to the deal announcement are also important leading indicators. Liodakis and Pang’s basket of “potential value-creating” acquirers outperformed the market by 24% and the typical bidder by 37%.

Although numerous research papers have been written on stock-price performance following mergers and acquisitions, the empirical evidence on changes in post-acquisition operating performance is relatively sparse and the conclusions vary widely. Martynova, Oosting, and Renneboog argue in Chapter 4 that the main reason for such widely differing views lies in the different, sometimes flawed, methodologies used to compare pre- and post-acquisition operating performance. Martynova, Oosting, and Renneboog adjust for industry, size, and pre-event performance; and they utilize pure cash-flow performance, including changes in working capital. They investigate a sample of 155 European corporate mergers and acquisitions completed between 1997 and 2001 and study a period of 3 years pre-acquisition until 3 years post-acquisition. Their first main result is that, after adjusting for industry, size, and pre-acquisition, the combined operating performance does not change significantly following mergers, whereas the unadjusted “raw” operating performance declines significantly. In addition, the acquirer and the target significantly outperform their industry median peers prior to the merger. This shows that to estimate changes in performance reliably, it is important to adjust raw performance not only for industry-median performance,

but also for (size and) pre-event performance, thereby taking into account possible mean reversion of a company's performance.

Renneboog and Szilagyi state in Chapter 5 that, even though bondholders are among the most important corporate stakeholders, academic research on how M&As affect them has been fairly limited. Until recently, only three main hypotheses have been tested in the empirical literature. First, bondholders may benefit more from diversifying deals because the cash-flow streams of the merging firms are less well correlated. Second, firms may reverse any bondholder gains by paying for acquisitions with borrowed cash, thereby inducing leverage. And third, the actual changes in bondholder wealth should be influenced by how the pre-merger risk profiles of bidder and target compare. The authors show that cross-border deals also provide a platform for interactions between governance and legal systems. Thus, if they expose firms to jurisdictions with better creditor protection, they may even allow creditors to strengthen their legal positions.

In Chapter 6, Goergen and Frecknall-Hughes investigate the acquisitions that offer target shareholders a choice of different types of means of payment (considerations), including the potential to mix and match these considerations. They also discuss the reasons that bidders may want to issue loan notes and why target shareholders may want to take up loan notes rather than cash or shares. In contrast to existing studies, the authors do not take the eventual payment for an acquisition as a given, but rather take into account the choice of different types of considerations offered to the target shareholders. Furthermore, in contrast with most other studies, which consider loan notes to be equivalent to cash, these authors clearly distinguish between the two. Goergen and Frecknall-Hughes draw three important conclusions. First, the popularity of loan notes increased from the late 1990s through the early 2000s. Second, contrary to what theories on asymmetric information argue and findings from empirical studies on wealth gains suggest, target shareholders do not always choose (exclusively) cash instead of shares. Third, clear benefits derive from loan notes issued both to the target shareholders and to the bidders. More precisely, using the tax models developed, the tax position of target shareholders may, in certain circumstances, make loan notes a more attractive choice than other types of consideration.

Section 2 of this volume deals with special types of takeovers: acquisitions of recently floated companies, reverse mergers, mergers in the insurance industry, and investments by venture-capital investors. In Chapter 7, the first chapter of this section, Audretsch and Lehmann observe that many new public firms are acquired within a short period after their IPO, a phenomenon often described as a double-exit strategy (old shareholders have two opportunities to exit: at the IPO and at acquisition). They ask a particular question: Why do firms forgo a private takeover but sell them soon after the IPO, even though the cost of going public often accounts for more than 10% of the funds raised? To answer this question, the authors analyze the determinants of being acquired within 3 years after IPO using a unique and hand-collected dataset of 285 IPOs in

Germany, mostly in the high-tech industry. What makes a recently floated firm an interesting acquisition target? About 12% of the firms are acquired within 3 years of their IPO. They find that the identity of controlling initial owners, and hence the corporate governance structure of firms, affects the likelihood of acquisitions after IPO. One factor that conditions the likelihood of newly public firms is the percentage of equity held by the different initial owners at time of IPO. Although venture capitalists may desire liquidity and returns more than control of the firm, Audretsch and Lehmann do not find a significant impact of the percentage of equity held by venture capitalists on the likelihood of being an acquisition target within three years after IPO. However, they demonstrate that banks as initial owners of IPO firms significantly increase the likelihood of being taken over after IPO.

Roosenboom and Schramade show in Chapter 8 that initial public offerings (IPOs) are not the only way of going public: Reverse mergers may offer a cost-efficient way of floating a company. In reverse mergers a private company *de facto* acquires a public target company whereas *de iure* it is the public company that acquires the private company. This way the private company, the *acquirer* in economic terms, can obtain a stock market listing for its shares via the “backdoor” without the costs and time associated with conducting an IPO. Target firms in reverse mergers are typically unprofitable shell companies. The authors study reverse takeovers in the U.K. They first calculate the abnormal returns to reverse-merger announcements and subsequently focus on the determinants. Finally, they measure the long-run stock price and operating performance of reverse-merger firms and compare them with IPO firms. They find that target returns in reverse mergers are significantly positive and are higher when target firms are in a bad financial condition. Roosenboom and Schramade conclude that this is consistent with the existence of large, previously unused tax shields. They also document that when bidders are relatively large, their chances of successful takeover completion are higher. They show that reverse-merger firms and matched IPO firms display similar stock and operating performance, which is inconsistent with the conventional wisdom that reverse mergers are mainly conducted by poor-quality private firms that want to escape regulatory scrutiny.

The final chapter of this section deals with the entry and exit of venture capitalists in Canadian firms over the period 1991–2004. Cummings and Johan study the complete series of exit possibilities: initial public offerings (IPOs, or new listings on a stock exchange for sale to the general public), acquisitions (in which the investor and entrepreneur sell to a larger company), secondary sales (in which the investor sells to another company or another investor, but the entrepreneur does not sell), buybacks (in which the entrepreneur repurchases the interest of the investor), and write-offs (liquidations). Their findings show that the patterns of exit vary, depending on the exit year, the characteristics of the venture-capital investor (private limited partnership, corporate, and government), the characteristics of the investee firm (industry and stage of development at first investment), and the characteristics of the transaction (capital requirements, syndication, and security design).

Section 3 of this volume focuses on irrationalities in the decision process of takeovers. In Chapter 10 Sudarsanam and Huang argue that one way to reduce risk-related agency conflicts is to structure the managers' compensation in such a way that it provides the proper risk incentives to managers (e.g., through executive stock options). The authors maintain that both the wrong monetary risk incentives and overconfidence can lead to excessive risk-taking. Avoiding such excessive risk-taking or, conversely, inadequate risk-taking by risk-averse managers requires a new monitoring role for corporate governance. Sudarsanam and Huang present an integrated model in which risk-taking and consequent firm performance are subject to the interacting influences of executive compensation structure, a behavioral bias, and corporate governance.

In Chapter 11, Pastor and Poveda believe that in stock-financed mergers the managers of acquiring companies have incentives to overstate the earnings because higher earnings may push up the stock prices, thereby engendering a more favorable exchange ratio in the stock-for-stock takeovers. The authors disclose that, as in the United States, acquiring Spanish firms show an increase in unexpected accruals prior to the merger announcement. They also find a reversion after the merger. So it seems that, despite the risk of detection in due diligence, the results point out that managers of acquiring firms make use of the discretion allowed in the accounting rules to overstate the accounting results in the year of the merger announcement.

In Chapter 12, Kräussl and Topper argue that size is the main factor explaining value in the Dutch M&A market. Their empirical results indicate that small companies earn significantly higher returns (of 2.65%) than do large companies upon the announcement of a transaction. In the final chapter of this book, Ali states that corporations routinely use buybacks to return excess capital to their shareholders, manage their capital structures and convey signals to the market about the corporation's financial performance. This chapter examines how buybacks can be used by Australian corporations to achieve those aims as well as undisclosed objectives such as consolidating management's control of the corporation and creating deterrence to takeover bids.

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