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Introduction

Steven N. Kaplan

This volume is a collection of six papers that provide in-depth case studies of a small number of mergers. These studies were motivated by two primary factors. First, the existing academic work on merger activity—mainly based on large sample studies—has provided mixed results. Some findings are clear while others are inconclusive. In particular, the academic literature is quite mixed on the effects of mergers on operating performance, productivity, and efficiency. The National Bureau of Economic Research and the Sloan Foundation sponsored the case studies in this volume with the intent of augmenting the existing literature and informing future large sample and field-based studies.

Second, these studies were undertaken in the midst of substantial merger activity in the latter half of the 1990s. The dollar volume of merger and acquisition (M&A) activity has set new records each year since 1995 (see fig. 1). More significantly, M&A activity in those years has exceeded 6 percent of total stock market value, approaching the levels of the 1980s (see fig. 2). Given the mixed results from previous studies, an additional goal of this volume is to increase our understanding of the current merger activity.

In this introduction, I briefly discuss the existing evidence on mergers and acquisitions; summarize the studies in this volume; and, finally, discuss the general lessons of these studies.

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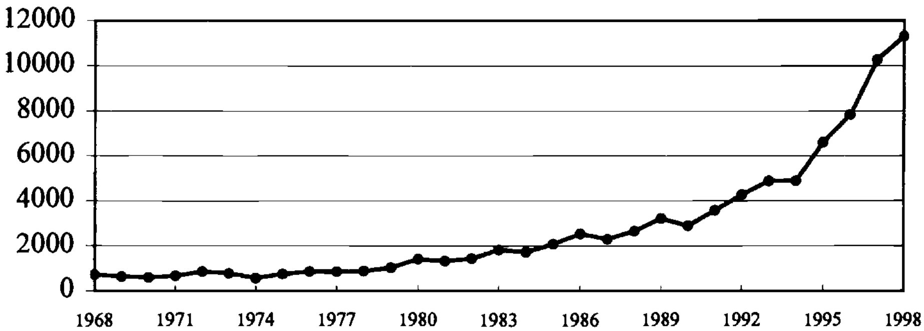

Fig. 1 All acquisition volume (billions of dollars)
Source: Mergerstat.

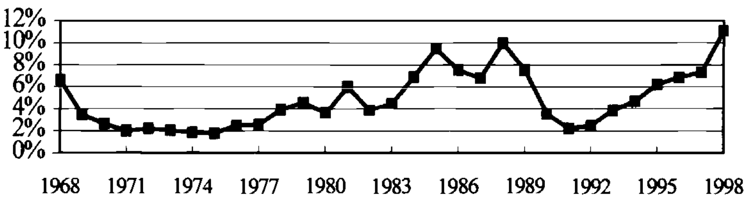

Fig. 2 All acquisition volume as a percentage of average total stock market capitalization
Source: Mergerstat; author's calculations.

Existing Evidence on Mergers and Acquisitions

The existing evidence on the effects of mergers and acquisitions on productivity or value comes from two basic types of large sample studies: event studies and performance studies.[1]

Event studies consider the returns to the shareholders of targets and acquirers in the days before and after an acquisition announcement. These studies consistently find that the combined returns to acquirer and target stockholders are unequivocally positive. These positive returns imply that the market anticipates that acquisitions on average will create value. These studies (and reactions) do not, however, provide insight into the sources of the value changes in mergers or whether the expectations of value changes are ultimately realized. Furthermore, the combined returns cover a broad range of responses from very positive to very negative.

Cross-sectional analyses of event-period returns provide some evidence that the broad range of combined announcement-period returns reflects the market's ability to forecast an acquisition's success. For example, both

1. See Kaplan, Mitchell, and Wruck (chap. 4 in this volume) for a more detailed version of this section.

Mitchell and Lehn (1990) and Kaplan and Weisbach (1992) find that there is a relation between (1) acquirer and combined returns and (2) the ultimate outcome of the acquisition. Other studies examine a number of different determinants of the cross-sectional variation in returns associated with acquisitions. (See, e.g., Lang, Stulz, and Walkling 1991. Maloney, McCormick, and Mitchell 1993; Morck, Shleifer, and Vishny 1990; and Servaes 1991.) These cross-sectional analyses of event-period returns provide some understanding of the nature of the market reaction to acquisition announcements. They do not, however, examine whether the anticipated value creation or improved productivity materializes. Nor do they have a great deal to say about the organizational mechanisms and management practices that drive acquisition success or failure.

Studies of postmerger performance attempt to measure the longer-term implications of mergers and acquisitions using both accounting and stock return data. Studies of accounting data fail to find consistent evidence of improved performance or productivity gains. (See, e.g., Healy, Palepu, and Ruback 1992, and Ravenscraft and Scherer 1987.) Similarly, studies that focus on acquirers' long-term stock performance find mixed results: abnormally negative stock returns after the acquisition (Agrawal, Jaffe, and Mandelker 1992), no abnormal returns (Franks, Harris, and Titman 1991), and negative abnormal returns only for stock mergers (Mitchell and Stafford 1996). Like the announcement-period event studies, longer-term performance and event studies document substantial cross-sectional variation in performance, but do not study the sources of value changes in mergers and acquisitions.

In sum, there are a number of questions that the existing economics and finance literature on mergers and acquisitions leaves unanswered. Existing work provides mixed results on the average impact of mergers and acquisitions. More importantly, existing work offers little insight into the determinants of an acquisition's success or failure.

The Studies in This Volume

The six papers in this volume are in-depth studies of a small number of mergers. Most of the papers study a particular industry. Unlike large sample studies, they cannot and do not consider the average effect of a large sample of acquisitions. Instead, they do an excellent job of analyzing the factors that lead to acquisitions and determining which factors account for the ultimate success or failure of the acquisition.

The first two studies focus more on the factors that lead to acquisition. In "Consolidation in the Medical Care Marketplace," Barro and Cutler study the hospital consolidation in the Massachusetts hospital market. They find that the consolidation is driven by a large decline in the demand for hospital beds over the last several years. That decline, in turn, has been driven by the proliferation of managed care and by technological change. Barro and Cutler find three manifestations of consolidation: (1) merger for closure of excess capacity; (2) merger for economies of scale on administrative, laboratory and other costs; and (3) merger for network creation and greater bargaining power. This paper, then, finds an economic rationale for consolidation and suggests that the effects of those consolidations have been to increase efficiency.

In "The Eclipse of the U.S. Tire Industry," Rajan, Volpin, and Zingales study the consolidation in the U.S. tire industry in the 1980s. This consolidation primarily consisted of foreign tire manufacturers acquiring U.S. tire manufacturers. The authors consider possible explanations for this activity. They argue that the acquisitions were not driven by efficiency gains through acquisition by more efficient producers. The authors also reject the argument that the acquisitions forced downsizing on U.S. manufacturers that had overinvested. Instead, the authors argue that the acquisitions were motivated by global economies of scale in production, product development, and marketing.

While the remaining four papers discuss the factors that lead to acquisitions, they focus more on the outcomes of those acquisitions and the determinants of those outcomes.

In "Is the Bank Merger Wave of the 1990s Efficient?" Calomiris and Karceski study nine bank mergers. They collect detailed data to determine if those nine mergers were successful ex post. The authors conclude that the bank mergers they study do create value, for the most part in the ways expected by the acquirers ex ante. The stock price reactions to the mergers and the value creation are, however, very noisy. Calomiris and Karceski also find that it is possible to obtain revenue gains or synergies via cross-selling in addition to those from cost cutting.

In "A Clinical Exploration of Value Creation and Destruction in Acquisitions," Kaplan, Mitchell, and Wruck study two mergers with extreme stock price reactions. They conclude that merger success or failure is a function of initial due diligence or information gathering, postmerger incentives, and organizational design. They also find that traditional measures of postmerger operating performance are very noisy measures of the actual performance of the merger.

In "Workforce Integration and the Dissipation of Value in Mergers," Kole and Lehn study USAir's acquisition of Piedmont Aviation. The acquisition turned out to be very unsuccessful. Kole and Lehn find that the key stumbling block came in integrating the workforces of the two companies. After the acquisition, USAir made the disastrous decision to increase the wages at Piedmont (the lower wage firm) rather than do nothing or reduce wages at USAir (the high wage firm). Kole and Lehn also argue that part of the reason for the acquisition and its lack of success was that the top executives involved cared more about survival than about shareholder value. Finally, Kole and Lehn report that the stock market reacted very positively to the acquisition when it was announced. As in several of the other studies in this volume, that reaction turned out to be wrong.

In "Paths to Creating Value in Pharmaceutical Mergers," Ravenscraft and Long study mergers in the pharmaceutical industry. They argue that large deals involving similar companies—horizontal deals—create the most value. This value is created from reducing costs in manufacturing, marketing and sales, headquarters, and research and development after the merger.

Conclusions and Generalizations

The question remains, what can be learned in this volume from the in-depth analyses of a small number of mergers that cannot be learned from large sample studies. The answer is a great deal.[2]

The studies do an excellent job of discussing the forces that lead to mergers and acquisitions. The success here is partially due to the fact that most of the studies consider industries. In particular, Barro and Cutler do an excellent job of discussing the reasons for hospital consolidation in Massachusetts as do Rajan, Volpin, and Zingales for the acquisitions in the U.S. tire industry.

The success in identifying these forces is noteworthy because a general pattern emerges from these studies. It is striking that most of the mergers and acquisitions were associated with technological or regulatory shocks. This is true in every industry studied in this volume—the airline, banking, hospital, pharmaceutical, and tire industries. This pattern supports the large sample results of Mitchell and Mulherin (1996) that merger activity is related to industry shocks.

At the same time that these studies shed light on the forces that lead to mergers, they also provide useful information—to both academics and practitioners—concerning what factors influence a merger's success or failure. Perhaps the most interesting factor, found in several of the studies, is the extent to which the acquirer understood the target before the acquisition. While this finding seems obvious and commonsensical, the fact that acquisitions fail because acquirers do not gain sufficient information on the target is important. For practitioners, it provides a strong incentive to get information before completing an acquisition. For academics, it provides some possible topics for further study. Why do executives undertake acquisitions without sufficient information gathering? What is the optimal amount of information to gather?

2. I particularly thank Jeremy Stein for helpful comments here.

The studies also suggest some issues that should be of interest to finance and organizational theorists. In particular, several of the papers yield interesting results concerning the boundaries of the firm. For example, the Kole and Lehn analysis of the USAir-Piedmont merger suggests that workers respond in substantially different ways to having low wages relative to similar workers in the same industry versus having low wages relative to similar workers in the same firm. The analysis of the Cooper-Cameron acquisition in Kaplan, Mitchell, and Wruck suggests that different organizational structures lead to important differences in productivity.

Finally, the studies should be of methodological interest for those who perform large sample studies. These papers indicate that large sample studies—whether accounting-based or stock-based—cannot possibly capture the richness of the economic effects of mergers. And, with some frequency, those large sample measures will not even capture the direction of the economic effect.

In summary, then, the studies in this volume do exactly what they are supposed to do. They augment and inform the existing literature on mergers and acquisitions. They also suggest areas for future work—both large sample and small.

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