Introduction

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During the mid-1980s the U.S. economy experienced the highest level of corporate takeover activity since the late 1960s, perhaps even since before the Great Depression. As with the takeover boom of the sixties, the recent one has brought after it a tide of legislation aimed at correcting the perceived abuses and societal ills generated by the acquisitions.

It is natural to seek simple, common explanations for the different waves of mergers the U.S. economy has experienced, but obvious differences in the characteristics of these periods make such an effort inadvisable. The recent takeover boom has exhibited many phenomena not observed in the trust building of the early 1900s or in the conglomerate mergers of the 1960s, in particular, hostile takeovers and takeover defenses, the acquisition of companies ranking among the largest in the country, and the prevalence of cash as a means of payment for acquired targets. Legislative initiatives have also changed, moving away from concerns for competition and efficiency to concerns for the stability of the financial and tax systems and for the competing rights and interests of shareholders, managers, employees, and other "stakeholders" who are interested parties to the takeover process.

One of the clearest lessons of the recent period is that, whatever the social gains generated by mergers and acquisitions, large redistributions are occurring simultaneously. It is therefore unrealistic to expect a social consensus regarding whether mergers are "good" or "bad," but it is also extremely important that "all" the costs and benefits of mergers be evaluated if their overall value is to be understood. Weighing the rights of different parties in a changing economic environment poses such difficult problems of analysis that it is important to avoid the additional burden of faulty information. Toward this goal of providing
better information about a broad range of issues concerning mergers and acquisitions, the National Bureau of Economic Research launched a project on this subject in 1985. This volume reports the results of much of the research that project has generated.

Much of the empirical research to date on mergers and acquisitions has focused on the financial aspects of takeovers. This research, with its disinterested perspective, has offered a comprehensible version of the story told in the popular business press through the experiences of the managers and investors involved in the takeover process. This is one of the merits of such research. But most citizens are neither economics professors nor CEOs or arbitrageurs, and the common view of the takeover process is a very different, negative one that is dominated by very different issues and concerns. The first two chapters of this volume are devoted to these questions, foremost among which is the impact of takeovers on the employees of acquired companies.

Charles Brown and James L. Medoff consider the impact of acquisitions on the wages and employment of workers in a comprehensive sample of Michigan companies during the years 1979–84. The authors identify three main classes of changes in business control: changes only in the identity of the company’s owner (“simple sales”); outright sales of the company’s assets (“assets-only sales”); and mergers, by which two preexisting companies form a combined entity. Over the five-year period 16 percent of all workers sampled were touched by one of the three types of transactions, although only 4 percent experienced a merger. Moreover, the average number of employees of the combined entity after merger was only 268 in 1984. These findings remind us that there are many types of potentially disruptive business restructurings besides mergers and acquisitions, and that the typical companies involved are relatively small.

For each of their three samples Brown and Medoff find that wages and employment change in opposite directions around the event of business ownership change, with employment increasing and wages declining in simple sales and mergers and the opposite pattern being observed in the case of assets sales. Perhaps most important for the current debate, however, is the relatively small magnitude of these changes. Among the mergers that occurred in 1981–82, for example, the wages of the combined work force fell by about 4 percent and employment rose by about 2 percent. This is not the stuff of which plant-closing laws are made.

Andrei Shleifer and Lawrence H. Summers argue in their chapter that the large hostile takeovers that have been the subject of much publicity in recent years are of a qualitatively different character than the mergers in the sample studied by Brown and Medoff, and that their effects on labor are likely to be quite different, too.
Shleifer and Summers make two basic points. First, the gains to target shareholders so well documented as occurring at the initiation of a takeover bid (discussed in chapters 5 and 8) need not signal a pure efficiency gain, but may well incorporate a large transfer component from other stakeholders in the firm, such as employees who take pay cuts or suppliers who are forced to renegotiate contracts. Second, hostile takeovers may generate efficiency losses of two types in addition to whatever efficiency gains they achieve through the restructuring of company operations.

The first type is the ex post inefficiency of increased transactions costs incurred in reorganizing the company. The second is the ex ante inefficiency associated with the reduced ability of a firm to participate in long-term implicit contracts with its stakeholders because a raider may violate the contracts if it is in the interest of the shareholders, ex post, to do so. This second type of inefficiency is potentially more serious than the first because of the spillover effects that a single, well-publicized hostile takeover can have on the ability of other firms to effectively commit themselves to honoring implicit contracts. The authors use the acquisitions of Trans World Airlines and Youngstown Sheet and Tube to support their propositions.

A frequent argument against hostile takeovers is that the threat of takeover attempts forces incumbent managers to shorten planning horizons that may already be too short from a social perspective. The logic of this position is that the stock market undervalues long-term projects, particularly research and development, so that firms undertaking such projects in the long-run interests of shareholders will suffer low stock prices and be ripe for takeover attempts. A response to this argument is that the stock market is rationally valuing the shares of firms whose managers are expanding operations by reinvesting the shareholders' money in projects with negative present value. It is difficult to evaluate these alternative views because the payoff to R&D expenditures comes only after many years and is difficult to measure. Nevertheless, the next two chapters do provide insight into this important question.

Examining a sample of all publicly traded U.S. manufacturing corporations acquired between 1976 and 1986, Bronwyn H. Hall considers the role played by R&D activity in the takeover process. Of 603 corporations taken over, 332 were acquired by other U.S. firms, 199 were taken private, and 72 were acquired by foreign parents. In recent years acquisitions have been concentrated in low-technology industries. Hall finds that there is no difference discernible in R&D expenditure levels (relative to firm size) of firms acquired and firms not acquired by public domestic corporations and that firms acquired by foreign or private parents are likely to have lower than average R&D activity. Although
parent companies tend to have lower R&D expenditure levels than their targets, there is no evidence of a drop in the combined levels of R&D expenditures after the merger occurs.

Randall Mørck, Andrei Shleifer, and Robert W. Vishny also relate the characteristics of firms to the likelihood of acquisition. Their sample is the 454 publicly traded companies on the Fortune 500 list in 1980. The authors find that 82 of these companies were acquired or taken private between 1981 and 1985, and they classify 40 of these takeovers as hostile and 42 as friendly, based on the way in which the takeover process began. They do find that the companies subject to hostile acquisitions had low ratios of market value to assets, both in absolute terms and relative to other firms in their industries. But these firms had a lower average growth rate and rate of investment than both the sample of all firms and the subsample of firms acquired in friendly transactions. Slow growth is certainly not a characteristic one associates with high R&D expenditures.

Mørck, Shleifer, and Vishny also find that targets acquired in hostile transactions had a lower fraction of equity ownership by the top two officers and a smaller likelihood that a member of the founding family was on the management team than firms not acquired. On the other hand, ownership by the top officers, ownership by the board, and the presence of a founding family member were all much more common in friendly transactions. These findings suggest that firms whose managers' interests are more closely aligned with those of their shareholders are less likely to be the targets of hostile acquisitions.

Whatever their effects on the behavior of corporate managers, hostile takeover attempts have a clear and immediate impact on the well-being of shareholders. Richard S. Ruback presents in his chapter an analysis of 33 failed takeover attempts between 1963 and 1979 of firms listed on the New York and American stock exchanges. Some of these firms were ultimately acquired by other bidders, others were not. Ruback finds that the average gain in share prices associated with initial bids was about 31 percent. (An interesting aspect of this gain is that nearly one third of it accrued during the nine-day period ending a day before the public announcement of the takeover bid, indicating a substantial amount of "leakage, as the use of inside information has euphemistically been called.) This percentage is consistent with earlier findings about takeover premia. Ruback also finds, however, that the subsequent announcement of a takeover bid termination results in a loss in share prices averaging 11 percent for the sample as a whole.

Why don't share prices drop by the full amount of the original takeover premia? Two additional pieces of evidence are that, for firms not eventually acquired, the loss with a terminated bid is larger, 17 percent, and that, after the termination announcement, share prices continue
to fall over a longer period of time. These findings suggest that one reason for the incomplete drop in share prices upon a termination is that shareholders expect that the firm, once "put in play," may remain so. Firms less likely to do so experience a larger drop in price. Several important questions remain unanswered. First, what fraction of the share price gains are "permanent," that is, not associated with increased residual takeover prospects but perhaps with managerial improvements initiated in response to the initial, unsuccessful bids? Second, does resistance to takeovers increase shareholder wealth, ex ante, by increasing the price of successful bids by a greater proportion than it reduces the likelihood of success? One cannot know by looking only at the "failures."

An argument against takeovers is that they are often tax driven, that the private gains realized by investors may be at the expense of other taxpayers. The Tax Reform Act of 1986 reduced two of the important tax incentives to merge: the ability to use the accumulated tax losses and credits of acquired companies to shield a company's own taxable income; and the opportunity to step up the bases of depreciable assets for tax purposes without paying capital gains taxes. Despite the enactment of this legislation, however, there has been an absence of empirical evidence on the importance of these and other tax benefits in driving merger activity.

In the chapter written by David Reishus and me, we compare a sample of 316 mergers and acquisitions involving large public corporations with a random sample of similar-size companies that did not merge, over the years 1968-83. We find that the average estimated tax benefits from combining were similar in the two samples, which constitutes fairly strong evidence that tax factors were not the major force driving the mergers. Only in cases in which companies with unused tax losses and credits acquired taxable companies (takeovers that were generally unaffected by the provisions of the 1986 act) was there a discernible impact of taxes on merger activity, but the impact was small relative to the aggregate level of mergers. In addition, we did not uncover significant changes in combined debt-equity ratios among the merging firms in our sample, relative to the changes observed in our control sample. This suggests that, at least until the past few years, the tax advantage associated with interest deductibility did not play an important role in fostering takeovers by large public corporations.

Beginning in 1984 a startling phenomenon arose in the U.S. nonfinancial corporate sector. In that year (according to statistics compiled by the Federal Reserve Board), and in 1985 and 1986 as well, net issues of new equity were markedly negative, as share repurchases exceeded new issues by about $80 billion in each year. Those alarmed by this process have called it the "deequitization of America," although the
coincident rise in corporate debt-equity ratios over these same years was muted by the rising stock market.

Share repurchases are rising not only because more firms are purchasing their own shares, but also because more purchases of shares in corporate acquisitions are being cash-financed. The growth of these activities in recent years is explored in the chapter by Laurie Simon Bagwell and John B. Shoven. As they discuss, a well-known puzzle is why firms subject their shareholders to ordinary income taxes on dividends when they could use other methods to distribute cash from the corporate sector at favorable capital gains treatment. A possible explanation for cash-financed acquisitions has been the "trapped equity" view stating that firms encounter difficulty repurchasing their own shares and are therefore led to repurchase the shares of other firms instead. Yet some firms do engage in massive purchases of their own equity, and so it is important to understand what leads some firms to do this and others to engage in cash acquisitions.

Bagwell and Shoven analyze repurchase and acquisition behavior in both 1976 and 1984. Among other results, they find that in both years firms with low ratios of market to book value and high ratios of cash flow to assets were more likely than other firms to repurchase their own shares, and that a low market to book ratio is also important in explaining acquisitions. Perhaps most important, however, are their findings that the most important predictor of whether a firm will engage in either activity is whether it did so in the previous year, that having previously engaged in one activity increases the predicted probability of engaging in the other as well, and that the behavioral equations for the 1976 and 1984 samples are not statistically different. Even though aggregate behavior changed in the intervening years, future research must gain a better understanding of the underlying factors causing persistent differences in the behavior of firms that the authors refer to as the "habit formation."

Evidence on the changing use of cash to finance mergers and acquisitions is provided by Julian R. Franks, Robert S. Harris and Colin Mayer, who study a sample of over 2,500 takeovers in the United States and the United Kingdom over the years 1955–85. The cross-national comparison is also valuable because the two countries differ in their tax treatment of cash acquisitions and in other laws regarding takeovers. The authors confirm that the use of cash as a means of payment in U.S. mergers and acquisitions has exhibited a strongly increasing trend over time, but that has not been true in Great Britain. The authors argue that the pattern of cash acquisitions in Britain has not been consistent with the predictions of the "trapped equity" view of cash-financed merger activity, even though the government's historical prohibition of own-share repurchases makes this view more plausible for Britain than for the United States.
Franks, Harris, and Mayer uncover several interesting patterns in their sample. They find that, in both countries, cash acquisitions carry a higher average premium for target shareholders than do stock acquisitions. This result may be explained by tax or nontax factors. The authors also discover that the shareholders of acquiring U.K. firms generally receive no benefit (or loss) as the result of the acquisition, but that acquiring U.S. shareholders gain in cash acquisitions but lose in stock acquisitions. These findings defy simple explanation, but they raise important questions about the economic motivations of takeover activity.

An even longer historical perspective is offered by Devra L. Golbe and Lawrence J. White, who compare the intensity of merger activity in the 1980s to that in earlier periods of high activity. The authors reject the argument that there have been no merger “waves,” but at the same time suggest that the current wave is not large by historical standards. Relative to the size of the economy, the current wave is about as large as that of the late 1960s. A much larger wave of activity emerged between the end of World War I and the Depression, and an even larger one took place around the turn of the century. Unlike the experience during the earliest of these periods, no noticeable change in industrial concentration has accompanied the recent merger waves. From 1963 to 1982, for example, the fractions of value added accounted for by the largest 50, 100, and 200 manufacturing companies were nearly constant. And the results are similar for the private sector as a whole.

Golbe and White attempt to explain the recent peak in merger activity using a variety of hypotheses. They find, however, that the only important explanatory variable for the aggregate level of activity, given the size of the economy, is the value of the stock market relative to book value.

The final contribution to this volume is a panel discussion by economists who have participated in U.S. policymaking in recent years. Leading off the discussion of the implications for the economy of recent policy actions, Joseph A. Grundfest and Gregg Jarrell review the recent insider-trading scandals and speculate about the effects of pending changes in securities regulations. Steven C. Salop explores the rationale of recent antitrust policy, as does Lawrence White, who also looks at the special problems in the banking and thrift industry.

Together the contributions in this volume present many important findings about the causes and consequences of takeovers. Perhaps the most important message they convey is that one should not look for a simple “bottom line” result from a class of transactions that vary so much in their size, method of financing, motivation, overall economic impact, and distributional effects.