The Market for Corporate Control: The Empirical Evidence Since 1980

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Corporate takeovers have been very big business in the 1980s. The Office of the Chief Economist (OCE) of the Securities and Exchange Commission estimates that shareholders of target firms in successful tender offers from 1981 through 1986 received payments in excess of $54 billion over the value of their holdings before the tender offers. Almost $38 billion of the total was received after 1984. If we include the increased wealth of target firm shareholders resulting from leveraged buyouts, mergers, and corporate restructurings (prompted in large part by the threat of takeovers) these numbers are even larger. W. T. Grimm & Co. collects similar data for a larger sample of change-of-control transactions, including mergers and leveraged buyouts. They estimate that from 1981 to 1986 the total dollar value of the premiums over the pre-announcement price paid for securities involved in change-of-control transactions was $118.4 billion.¹ Corporate restructurings have created even more

¹These estimates understate the total premiums (dollar value of the percentage increase in the target's stock price caused by the takeover) paid in change-of-control transactions. OCE's sample is limited to the first successful tender offer for a firm. Thus, if an "auction" for the firm develops, resulting in an even higher offer price, they do not capture that additional premium. In addition, no account is made for tender offers that do not ultimately succeed. Shareholders may sell their shares in the market at the premium induced by the offer before it is known that the offer fails. The W. T. Grimm data also understates the total profits earned by stockholders because they calculate the premium based on the market price only five days before the initial public announcement and do not capture the premium attributable to increases in share prices that occur more than five days in advance of a public announcement.

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wealth. For example, Jensen (1986) estimated that the restructurings of Phillips, Unocal and Arco created total gains to shareholders of $6.6 billion by reducing investment in negative net present value projects.

There are numerous factors behind the high level of takeover activity in the 1980s. For example, antitrust regulators have come to understand that in the increasingly competitive international marketplace U.S. interests are well-served by domestic mergers that could be objectionable in a more closed economy. Today's antitrust regulators almost never object to vertical combinations, and even horizontal mergers between industry leaders—completely taboo before the 1980s—are often allowed today.

Deregulation also has induced merger and acquisition activity by calling forth new skills and strategies, and new management teams to implement them. Many of the mergers, takeovers, and restructurings over the last ten years have occurred in industries that recently were deregulated such as airlines and transportation, financial services, broadcasting, and oil and gas. For example, transportation and broadcasting together accounted for 20 percent of all mergers and acquisition activity from 1981 and 1984 while oil and gas accounted for another 26.3 percent (Jensen, 1986).

Other factors motivating the high level of takeover and restructuring activity in the 1980s include innovations in takeover financing, less potent state antitakeover regulations, the retreat by the Federal courts and regulatory agencies from protecting besieged target firms, and learning about the possible returns to this type of activity. These factors are critical to understanding why firms that were considered "untouchable" not long ago have been the targets of hostile takeovers with increasing frequency. This growing list includes USX, CBS, Phillips, and TWA, to name just a few.

The Council of Economic Advisors (CEA) in the 1985 Economic Report of the President provides data on the extent of the takeover activity in the 1980s and the importance of large transactions in explaining this activity. The CEA states that the increase in merger and acquisition activity in the 1980s is due to a large increase in the size of the largest transactions. Their evidence indicates that in the period 1981 to 1984 the average annual reported real value of mergers and acquisitions was 48 percent greater than in any four year period from the late 1960s to the early 1970s. In addition, of the 100 largest acquisition transactions recorded through 1983, 65 occurred after 1982 and only 11 took place prior to 1979.

Returns to Bidders and Targets

Critics of takeovers question whether tender offers, mergers, and leveraged buyouts produce net gains to society. Critics argue any gains to a given party are simply redistributions resulting from losses to someone else (or more colorfully put, a pirating of assets by modern financial buccaneers). Also critics contend that battles for
corporate control divert energy from more productive endeavors.\(^2\) In this section, we find that such criticisms are ill founded, and thus conclude that battles for corporate control serve a beneficial function for the economy.

The market for corporate control is the market for the right to control the management of corporate resources. In a takeover, an outside party seeks to obtain control of a firm. There are several types of takeovers, including mergers, hostile and friendly tender offers, and proxy contests. In a merger the bidder negotiates an agreement with target management on the terms of the offer for the target and then submits the proposed agreement to a vote of the shareholders. In a tender offer, a bidder makes an offer directly to shareholders to buy some or all of the stock of the target firm. A “friendly” tender offer refers to offers that are supported by target management. The most controversial type of takeovers are “hostile” tender offers, which are tender offers that are opposed by target managements. In a proxy contest, a dissident group attempts through a vote of shareholders to obtain control of the board of directors. Finally, leveraged buyouts are buyouts of shareholder's equity, heavily financed with debt by a group that frequently includes incumbent management.

Many of the studies reviewed in this paper are event studies that measure the effects of certain unanticipated events (such as a takeover or other control contest) on stock prices, after correcting for overall market influence on security returns. Any finding of abnormal returns, therefore, shows how the stock market views the impact of the event on the firm's common stockholders. (See Brown and Warner, 1985, for a more thorough review of event study methods.)

**Returns to Shareholders of Target Companies**

Shareholders of target companies clearly benefit from takeovers. Jarrell and Poulsen (1987a) estimate the premiums paid in 663 successful tender offers from 1962 to December 1985. They find that premiums averaged 19 percent in the 1960s, 35 percent in the 1970s, and from 1980 to 1985 the average premium was 30 percent. These figures are consistent with the 13 studies of pre-1980 data contained in Jensen and Ruback (1983) which agree that targets of successful tender offers and mergers before 1980 earned positive returns ranging from 16 percent to 30 percent for tender offers.\(^3\)

Similar results are contained in studies of leveraged buyouts and going private transactions. Lehn and Poulsen (1987) find premiums of 21 percent to shareholders in

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\(^2\) Many critics of acquisition activity (such as the Business Roundtable) are primarily concerned with alleged abuses arising from hostile takeovers. The other types of acquisition activity are approved by target firms' management who allegedly are the individuals most concerned with the welfare of the target firm and its shareholders.

\(^3\) Jensen and Ruback (1983) review 13 studies published between 1977 and 1983—six on mergers and seven on tender offers. Their survey provides a concise summary of the pre-1980 data. But because of the lengthy review process for academic journals, the most up-to-date sample used in these studies ends in 1981, and most do not go beyond the late 1970s. This paper can be considered an update of Jensen and Ruback with a focus on recent empirical studies that cover takeovers made in the 1980s.

OCE (1985a) measures premiums paid by comparing the price per share offered by the bidder to the trading price of the stock one month before the offer, not adjusting for changes in the market index (also see Comment and Jarrell, forthcoming). Using a comprehensive sample of 225 successful tender offers from 1981 through 1984, including over-the-counter targets, OCE finds the average premium to shareholders to be 53.2 percent. OCE has updated these figures for 1985 and 1986 and finds a decrease over the last two years. OCE finds that the average premium is 37 percent in 1985 and 33.6 percent in 1986.4

While the evidence reported thus far indicates substantial gains to target shareholders, it probably understates the total gains to these shareholders. In many cases events occur before a formal takeover offer, so studies that concentrate on the stock price reactions to formal offers will understate the total gains to shareholders.

Several recent empirical studies examine the stock market reaction to events that often precede formal steps in the battle for corporate control. Mikkelson and Ruback (1985a) provide information on the stock price reaction to Schedule 13D filings. Schedule 13D must be filed with the SEC by all purchasers of 5 percent of a corporation’s common stock, requiring disclosure of, among other things, the investor’s identity and intent. Mikkelson and Ruback find significant price reactions around the initial announcement of the filing, and that the returns depend on the intent stated in the 13D. The highest returns, an increase of 7.74 percent, occurred when the filer in the statement of intent indicated some possibility of a control change. However, the abnormal returns were only 3.24 percent if the investor reported the purchase was for investment purposes. Holderness and Sheehan (1985) find a differential stock market effect to 13D filings depending on the identity of the filer. They show the filings of six “corporate raiders” increased target share prices by a significantly greater amount than a sample of other filers (5.9 percent to 3.4 percent).

More direct evidence that significant stock price increases occur prior to formal announcements of corporate events is contained in OCE (1987c) which finds a significant increase in the stock price of target firms in 172 successful tender offers in the period before any announcement of the offer. OCE finds a run-up in stock prices of 38.8 percent of the total control premium by the close of day before the offer announcement. The announcement date is, in the parlance of Wall Street, the date the target firm was put “in play” and represents some event having significant implications for corporate control. For example, the in-play date in some cases is the formal offer but in other cases is the eventual bidder’s filing of a Schedule 13D with corporate control implications for the target.

4The OCE (1985a) study also explicitly tests and rejects the popular theory that two-tier tender offers disadvantage target shareholders. Some observers argue that two-tier offers—in which the bidder first makes an offer for control of the firm and then makes a “clean-up” offer for remaining shares at a lower price—coerces shareholders to tender to avoid the clean-up price. OCE finds that two-tier offers have overall premiums that are nearly identical to the average for any-or-all offers and that there is no evidence that two-tier offers “stampede” shareholders into unwise trading decisions.
Table 1
Cumulative excess returns to successful bidders for tender offers during 1960 to 1985, by decade

<table>
<thead>
<tr>
<th>Trading-day Interval</th>
<th>Cumulative excess returns in percent</th>
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<tbody>
<tr>
<td></td>
<td>All</td>
</tr>
<tr>
<td>− 10 to +5</td>
<td>1.14</td>
</tr>
<tr>
<td>(t-stat.)</td>
<td>(2.49)</td>
</tr>
<tr>
<td>−10 to +20</td>
<td>2.04</td>
</tr>
<tr>
<td>(t-stat.)</td>
<td>(3.31)</td>
</tr>
<tr>
<td>Number of observations</td>
<td>405</td>
</tr>
</tbody>
</table>

Source: Jarrell and Poulsen (1987a)

While some commentators argue that price run-up before the formal announcements of tender offers indicates the presence of illegal insider trading, OCE’s evidence demonstrates that the legal market for information can explain much of the run-up. OCE shows that a significant portion of the run-up can be explained by three readily identifiable influences on pre-bid trading: media speculation, the bidder’s foothold acquisition in the target, and whether the bid is friendly or hostile. Systematic relations between these factors and run-up in target share prices indicate that there is an active market for information about impending takeover bids and a large portion of the run-up can be explained by factors other than illegal insider trading. OCE’s results on pre-bid market activity are supported by Comment (1986).

Returns to Shareholders of Acquiring Companies

The 1980s evidence on bidders comes from Jarrell and Poulsen (1987a), with data on 663 successful tender offers covering 1962 to 1985. Table 1 summarizes the excess returns to 440 NYSE and AMEX bidders. For the entire sample period bidders on average realized small, but statistically significant, gains of about 1 to 2 percent in the immediate period around the public announcement. Most interesting is the apparent secular decline in the gains to successful bidders in tender offers. Consistent with the previous studies reviewed by Jensen and Ruback (1983), Table 1 shows positive excess returns of five percent during the 1960s, and a lower, but still significantly significant, positive average of 2.2 percent over the 1970s. However, the 159 cases from the 1980s show statistically insignificant losses to bidders.

How the Distribution of Takeover Gains Is Determined

Companies that are targets of takeovers receive the bulk of the value created by corporate combinations and these gains are not offset by losses to acquirers. As one might predict, an important factor in determining how these takeover gains are split
seems to be how many bidders are trying to acquire the target company. In fact, the secular decline in the stock returns to bidders probably reflects the increased competition among bidders and the rise of auction-style contests during the 1980s.5

Conditions which foster an increase in multiple bidding tend to increase target premiums and reduce bidder returns. For example, Jarrell and Bradley (1980) demonstrate that Federal (Williams Act) and state regulations of tender offers have this effect because they impose disclosure and delay rules that foster multiple-bidder, auction contests and preemptive bidding.6 In addition to greater regulation, other factors contributing to this increased competition include court rulings protecting defensive tactics, the inventions of several defenses against takeovers, and the increase in sophisticated takeover advisers to implement them.

Interesting support for this theory in the banking industry is provided by James and Wier (1987). Federal and state banking regulations effectively limit the number of eligible acquisition partners, thus affecting the number of potential substitutes for bidders or targets in particular transactions. For 39 proposed banking acquisitions, James and Wier measure a positive relation between the bidder’s share of the takeover gains and the number of alternative targets, and a negative relation between the bidder’s share and the number of alternative bidders.7

The Source of Takeover Gains

Shareholders of target companies definitely gain from mergers and tender offers. But much uneasiness has been expressed at who might be paying for those gains. In their summary several years ago, Jensen and Ruback (1983, p. 47) were forced to conclude that “knowledge of the sources of takeover gains still eludes us.”8 The studies they reviewed did not allow them to judge the many redistributive theories, which suggest that shareholder gains are offset by economic losses to others. Since then, many popular “redistributive theories” have been examined. The evidence has led many financial economists like Jensen (1986, p. 6) to attribute takeovers, leveraged buyouts, and restructurings to “productive entrepreneurial activity that improves the control and management of assets and helps move assets to more productive uses.” We now turn to a review of the most important of these redistributive theories.

5Bradley, Desai, and Kim (1984) show that targets gain more in multiple bidder than single bidder contests.
6The Williams Act contains the Federal regulations of tender offers and was enacted in July 1968. Its main components are disclosure requirements, a regulated minimum offer period, and antifraud provisions that give target management standing to sue for injunctive relief.
7Other evidence supporting this point includes a recent paper by Guerin-Calvert, McGuckin, and Warren-Boulton (1986) that reexamines the effects of state and Federal regulations of tender offers. They also find the regulations increase the incidence of multiple-bidder auction takeovers among all control contests. Also consistent with this result is the evidence on the French experience presented by Eckbo and Langohr (1986). They show that the imposition of disclosure-only (not delay) rules governing tender offers in France significantly shifted the gains in French takeovers from acquirers to targets.
8Jensen and Ruback review the empirical work testing the market power theory of takeovers by Eckbo (1983) and Stillman (1983). This theory is that increased monopoly power in product markets explains takeover gains. Jensen and Ruback conclude the evidence rejects this theory as the source of gains from takeovers. Recent papers by Eckbo and Wier (1985) and by Eckbo (1985) provide empirical support for the conclusion that except in isolated cases, increased market power cannot explain the gains from takeovers.
Short-Term Myopia and Inefficient Takeovers. This theory is based on an allegation that market participants, and particularly institutional investors, are concerned almost exclusively with short-term earnings performance and tend to undervalue corporations engaged in long-term activity. From this viewpoint, any corporation planning for long-term development will become undervalued by the market as its resource commitments to the long-term depress its short-term earnings, and thus will become a prime takeover candidate.

Critics of this theory point out that it is blatantly inconsistent with an efficient capital market. Indeed, if the market systematically undervalues long-run planning and investment, it implies harmful economic consequences that go far beyond the costs of inefficient takeovers. Fortunately, no empirical evidence has been found to support this theory. In fact, a study of 324 high research and development firms and of all 177 takeover targets during 1981–84 by the SEC's Office of the Chief Economist (OCE, 1985b) shows evidence that (1) increased institutional stock holdings are not associated with increased takeovers of firms; (2) increased institutional holdings are not associated with decreases in research and development; (3) firms with high research and development expenditures are not more vulnerable to takeovers; and (4) stock prices respond positively to announcements of increases in research and development expenditures.

Further evidence opposing the myopia theory is provided by Hall (1987) in an NBER study and by McConnell and Muscarella (1985). Hall studies data on acquisition activity among manufacturing firms from 1977 to 1986. She presents evidence that much acquisition activity has been directed towards firms and industries which are less intensive in R&D activity. She also finds that firms involved in mergers show little difference in their pre- and postmerger R&D performance compared with industry peers. McConnell and Muscarella, in a study of 658 capital expenditure announcements, show that stock prices respond positively to announcements of increased capital expenditures, on average, except for exploration and development announcements in the oil industry.

Undervalued Target Theory. Recalcitrant target management and other opponents of takeovers often contend that because targets are "undervalued" by the market, a savvy bidder can offer substantial premiums for target firms while still paying far below the intrinsic value of the corporation. By this theory, it becomes the duty of target managements to defend vigorously against even high premium offers since remaining independent, it is argued, can offer shareholders greater rewards over the long term than are offered by opportunistic bidders seeking short-term gains.

However, the evidence shows the promised long-term gains from remaining independent do not usually materialize. When a target defeats a hostile bid, its post-defeat value reverts to approximately the (market adjusted) level obtaining before the instigation of the hostile bid (Bradley, Desai and Kim, 1983; Easterbrook and Jarrell 1984; Jarrell 1985; Ruback, 1986). Bhagat, Brickley and Lowenstein (1987) used option pricing theory to show that the announcement period returns around cash tender offers are too large to be explained by revaluations due information about undervaluation.
This evidence indicates that the market does not, on average, learn much of anything that is new or different about target firms' intrinsic values through the tender offer process, despite the tremendous attention lavished on targets, and the huge amounts of information traded among market participants during takeover contests. If undervaluation had indeed been present, then the deluge of new information on the intrinsic value of targets should have caused fundamental price corrections even in the event of takeover defeats. But in the overwhelming majority of cases studied, prices dropped rather than increased for target firms that fought off takeovers.

Do Tax Effects Motivate Mergers and Takeovers? Tax motives have long been suspected as an important cause of merger and acquisition activity. Indeed, the Tax Reform Act of 1986 contains several provisions aimed at reducing the tax benefits available through mergers. Most recent studies, however, assign tax benefits a minor role in explaining merger and takeover activity. Auerbach and Reishus (1987a) study 318 mergers and acquisitions during 1968–83 to estimate the tax benefits available in these transactions from increased use of tax losses and credits. They found that these tax benefits in general were not a significant factor in the majority of large acquisitions. In a fair number of transactions, however (potentially 20 percent of the mergers), tax factors did appear to be significant enough to affect the decision to merge. Lehn and Poulsen (1987) find, in their study of leveraged buyouts from 1980–84, that the premiums paid are directly related to potential tax benefits associated with these transactions, suggesting that in part these leveraged buyouts are motivated by tax considerations.

In summary, acquiring firms' tax losses and credits, and the option to step-up the basis of targets' assets without paying corporate level capital gains, are two tax benefits that appear to have had some impact on merger activity. However, the evidence suggests that much of the takeover activity in the last twenty years was not tax motivated.

Do Bondholders Lose From Takeovers? Some critics of takeovers suggest that the premiums paid by bidders are not a result of any wealth enhancing changes, but instead represent a redistribution from the holders of the target's bonds and preferred equity. For example, the bonds of an acquiring firm can drop in value if the acquiring firm pays cash for a riskier target firm. Given that the combined value of the two firms remains unchanged, the decline in the bond value will be captured as a gain by

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9 A review of the effects on the takeover market of the change of the 1986 Tax Reform Act is contained in Steindel (1986). The 1986 Tax Reform Act repeals the General Utilities doctrine, which states that corporations liquidating their businesses are not subject to capital gains tax on the value of their assets. A firm using General Utilities in a liquidation (the purchaser of at least 80 percent of the stock of a corporation may treat the transaction for tax purposes as a liquidation) avoids the tax liability that comes with appreciated assets. Steindel argues that the repeal of the General Utilities doctrine combined with the changes in corporate tax rates reduces the attractiveness of many mergers and acquisitions. Other tax changes with effects on takeover activity include the increase in the personal capital gains tax and new rules on the transfer of net operating loss carryforwards.

10 However, Auerbach and Reishus (1987b) compare actual mergers over 1968–1983 with a control group of nonmerging firms and conclude that the potential increase in interest deductions and unused tax losses and tax credits of the acquired firms have not driven acquisitions.
some other class of security holder (such as common stockholders). However, the empirical evidence does not support this argument.

Denis and McConnell (1986) examine the returns on various classes of the securities of a sample of 132 mergers in the period 1962 to 1980. Denis and McConnell’s results are consistent with earlier studies in that they find gains to mergers and no losses to bondholders. Their results indicate that on average holders of common stock, convertible and nonconvertible preferred stock, and convertible bonds in the acquired firm gain from a merger. Those who hold nonconvertible bonds in the acquired firm and convertible bonds, nonconvertible bonds, and nonconvertible preferred stock in the acquiring firm neither gain nor lose in a merger. Denis and McConnell also find some evidence that the acquiring firms’ common shareholders do not lose and may gain from mergers, especially in the days immediately following the announcement. Lehn and Poulsen’s (1987) study of 108 leveraged buyouts from 1980 to 1984 finds no support for the redistribution theory. They find no evidence that the shareholder value created by the leveraged buyouts comes at the expense of preferred shareholders or bondholders. In sum, the evidence provides no support for the hypothesis that the supposed gains from acquisitions are actually transfers from the holders of senior securities to the holders of common stock.

Do Labor’s Losses Finance Takeovers? Recent takeovers in the airline industry have involved conflict between acquiring-firm management and the (usually) unionized labor of the target firm. These conflicts have contributed to the popular generalization that shareholder premiums from takeovers come largely at the expense of labor. Shleifer and Summers (1987) articulate this view more rigorously focusing on implicit long-term contracts between labor and incumbent (target) management. They argue raiders can sometimes exploit these contracts by buying a controlling share of the equity and financing the premium by using pressure tactics to force significant wage concessions. In theory, this activity can be socially inefficient by ruining the market for these implicit long-run labor contracts and forcing labor and management to use less efficient contracting devices.

This redistributive theory from labor to shareholders has not been tested widely, but a recent NBER study by Brown and Medoff (1987) presents statistical evidence based on Michigan’s employment and wages that fails to support it. Although this close look at Michigan is not necessarily indicative of the U.S. experience (for example, it contains few large mergers or hostile tender offers), the results are that wages and employment rise on average for firms that are involved in acquisitions.

Summary of Source of Gains

The various redistribution theories of takeover gains have been the subject of considerable empirical work since the Jensen and Ruback (1983) review. Most convincing is the empirical rejection of the undervaluation theory: target firms cannot be depicted generally as being “undervalued” by the stock market. Also soundly

\[11^{\text{The senior security holders of the target firm can also lose depending on the takeover’s effect on the riskiness of their claims.}}\]
rejected by the data is the short-term myopia theory. The evidence gives tax-benefits theories at least a minor role in explaining merger and tender offer activity. Finally, evidence is inconsistent with the theories that the stock-price gains to shareholders come from bondholders and labor. Although some individuals (incumbent management, for example) obviously lose in at least some takeovers, the literature, while not conclusive, offers little or no support for the notion that the redistribution theories explain a major portion of the apparent gains from takeovers. It has been impossible so far to find systematic losses which could offset the enormous gains to target and bidding firm shareholders from mergers, tender offers, and other corporate-control activities. We therefore conclude that evidence is consistent with the notion that these corporate transactions reflect economically beneficial reshufflings of productive assets.

The Effects of Defending Against Hostile Takeovers

Defensive strategies against hostile takeovers have always been controversial since they pose a conflict of interest for target management. After all, takeovers can impose significant welfare losses on managers, who may be displaced and lose their organization-specific human capital. These conflicts may tempt some managers to erect barriers to hostile takeovers, thus insulating themselves from the discipline of the outside market for control at the expense of their shareholders and the efficiency of the economy.

However, providing target management with the power to defend against hostile takeover bids might also help target shareholders during a control contest. Target management can in certain cases defeat bids that are "inadequate." Although this rationale is popular, the evidence discussed earlier shows that in very few cases do these alleged long-term gains of independence actually materialize. The other benefit of resistance comes when resistance by target management helps promote a takeover auction. Litigation and other blocking actions can provide the necessary time for the management of the target firm to "shop" the target and generate competing bids. This auction rationale for resistance is harder to reject statistically. Evidence on occasional shareholder losses after the defeat of a takeover attempt does not in itself disprove the auction theory. This negotiating leverage can be expected to fail in some cases, with the sole bidder becoming discouraged and withdrawing. It is a gamble. The hypothesis is rejected only if the harmful outcome of defeating all bids is sufficiently frequent and costly to offset the benefits of inducing higher takeover prices. One must also consider the social cost of tender offers that never occur because of the presence of defensive devices. Unfortunately, this deterrence effect is very difficult to measure and we present no direct evidence of the extent of these costs.

Evidence on the effects of defensive measures by target management is obtained mainly from two approaches, the event-type study and the outcomes-type study. The event-type study recognizes that an efficient market must judge this cost-benefit tradeoff when it adjusts the market value of a firm in response to the adoption of a
charter amendment or some other kind of resistance. Alternatively, the outcomes-type study examines the actual outcomes of control contests over a significant time horizon among firms using a common kind of resistance—say all firms adopting poison pills. That is, an event study measures the stock price reaction to the introduction of defensive devices while outcomes studies follow the use of defensive devices in control contests to determine their effects on the outcomes of the contests.

Many defensive measures must be approved by a vote of the shareholders. Hence, voting has the potential to block management-sponsored proposals that harm shareholders, depending on the costs and benefits to individual shareholders from collecting relevant information and voting. In general, a shareholder with a small amount of shares will not invest heavily in the voting process since a small number of shares will not generally affect the outcome regardless of how they are voted. However, if individual voting and information costs are near zero even the shareholder with few shares can be expected to vote against management on value-decreasing proposals. Alternatively, large outside block holders (like institutional investors) internalize more of the benefits from participation in the voting process and can be expected to take an active interest in voting on antitakeover proposals even when the information gathering and voting costs are positive. Since voting rights can block harmful measures, we distinguish between two broad categories of defensive measures, those receiving approval by voting shareholders and those adopted unilaterally by management.

Defensive Measures Approved by Shareholders

Antitakeover amendments generally operate by imposing new conditions that must be satisfied before changing managerial control of the corporation. They are almost always proposed by management and they usually require majority voting approval by shareholders. Proposed antitakeover amendments are very rarely rejected by voting shareholders; Brickley, Lease, and Smith (forthcoming) find for a sample of 288 management-sponsored antitakeover proposals in 1984 that about 96 percent passed.

Supermajority Amendments. Most state corporation laws set the minimum approval required for mergers and other important control transactions at either one-half or two-thirds of the voting shares. Supermajority amendments require the approval by holders of at least two-thirds and sometimes as much as nine-tenths of the voting power of the outstanding common stock. These provisions can apply either to mergers and other business combinations or to changing the firm’s board of directors or to both. Pure supermajority provisions are very rare today, having been replaced by similar provisions that are triggered at the discretion of the board of directors. This allows the board to waive the supermajority provisions allowing friendly mergers to proceed unimpeded.

Five years ago, Jensen and Ruback (1983) found mixed evidence on the effect of supermajority amendments passed before 1980. However, a more recent study by Jarrell and Poulsen (1987b), derived from OCE (1985c), covers 104 supermajority amendments passed since 1980 and reports significant negative stock-price effects of
over 3 percent around the introduction of the proposals. They also show that firms passing supermajority amendments have relatively low institutional stockholdings (averaging 19 percent) and high insider holdings (averaging 18 percent), which they interpret as helping to explain how these amendments received voting approval despite their harmful wealth effect. That is, firms proposing these amendments have fewer blockholders with incentives to invest in the voting process. Jarrell and Poulsen further conjecture that the increased shareholder resistance to harmful supermajority amendments helps explain their declining popularity in contrast to the success of the fair price amendment which appear less likely to harm shareholders (as discussed below).

**Fair Price Amendments.** The fair price amendment is a supermajority provision that applies only to nonuniform, two-tier takeover bids that are opposed by the target's board of directors. Uniform offers that are considered "fair" circumvent the supermajority requirement, even if target management opposes them. Fairness of the offer is determined in several ways. The most common fair price is defined as the highest price paid by the bidder for any of the shares it has acquired in the target firm during a specified period of time. Jarrell and Poulsen (1987b) report that 487 firms adopted fair price charter provisions between 1979 and May 1985, with over 90 percent of these coming in the very recent period of 1983 to May 1985.

The stock price effects reflect the low deterrence value of the fair price amendment. Jarrell and Poulsen (1987b) report an average loss of 0.73 percent around the introduction of these amendments, which is not statistically significant. They also show that firms adopting fair price amendments have roughly normal levels of insider holdings (12 percent) and of institutional holdings (30 percent). They interpret this evidence as supporting the view that shareholder voting retards adoption of harmful amendments, especially when insider holdings are low and institutional holdings are high. Further support for this view is provided by Brickley, Lease, and Smith (forthcoming) who document that "no" votes on antitakeover amendments (especially ones that harm shareholders) increase with institutional and other outside blockholdings, while "no" votes decrease with increases in managerial holdings.

**Dual-Class Recapitalizations.** These plans restructure the equity of a firm into two classes with different voting rights. Although several methods are used, the common goal is to provide management or family owners with voting power disproportionately greater than provided by their equity holdings under a "one share-one vote" rule.\(^{12}\)

Evidence before and after 1980 has confirmed that the market generally values shares with voting power more than those without. Lease, McConnell, and Mikkelsen (1983) examine 30 firms having dual-class common stock and show that voting stock on average trades at a significant premium, ranging from one to seven percent. A recent paper by OCE (1987a) examines the monthly stock prices of 26 OTC and

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12 For over 60 years, the New York Stock Exchange did not allow any member firm to have a dual-class capitalization structure, but it has recently proposed a liberalization to allow dual-class listings in response to competitive pressures from Amex and OTC markets. Amex currently allows dual-class listings with some restrictions, and the OTC market has no restrictions beyond usual state-law requirements.
AMEX firms having dual-class common and shows an average discount of four to five percent for low-vote common, though the discount is reduced when the low-vote stock has rights to preferential dividends.

Of course, the fact that the market values voting power does not demonstrate that dual-class recapitalizations reduce the overall price of stock. DeAngelo and DeAngelo (1985) examine in detail 45 firms that had dual-voting common stock as of 1980. They find that, after restructuring, management and family insiders control a median of 57 percent of the votes and 24 percent of the common stock cash flows. This confirms that dual-class structures often confer substantial voting powers on incumbent management. However, DeAngelo and DeAngelo also suggest that the shareholders of the firms in this sample found it beneficial to contract with incumbent management to limit the competition for management of their firms. They argue that shareholders rationally accept a reduced potential for hostile takeovers in return for other benefits, such as greater incentives for incumbents to make specific long-term investments in human capital.

Two recent studies have addressed the empirical question of whether dual-voting structures are beneficial, as DeAngelo and DeAngelo suggest, or harmful to outside shareholders. Partch (1987) examines the stock-price reaction around the announcement of the proposed dual-class recapitalizations for 44 firms. She reports nonnegative share-price effects. However, for more recent recapitalizations, Jarrell and Poulsen (forthcoming, extending OCE 1987a, 1987d) find negative effects at the announcement of dual-class recapitalizations. For a sample of 89 firms delisting from 1976 through 1987, they report an average abnormal stock price effect of -0.93 percent.

If dual-class recapitalization proposals are viewed primarily as takeover defenses, their announcement should cause negative stock price reactions, similar to those observed at the announcement of supermajority amendments. However, firms announcing dual-class recapitalizations have some unusual characteristics. Jarrell and Poulsen (forthcoming) find that the average net-of-market return to their 94 dual-class firms over the year preceding the recapitalization is over 37 percent. Jarrell and Poulsen and Partch both find that insider holdings average 44 percent before the recapitalization, and that recapitalization significantly increases insider voting control. These two characteristics suggest that the typical dual-class firm is already controlled by insiders and the recapitalization provides a means to raise needed capital for positive net present value projects without the dilution of control.

Changes in the State of Incorporation. Changing the state of incorporation can affect the contractual arrangements between management and shareholders. For example, some states such as Ohio, Indiana, and New York have elements in their corporate codes that make takeovers more difficult than in other states. Dodd and Leftwich (1980) find that firms change their state of incorporation after a period of superior performance and that the change itself is associated with small positive excess returns. More recently, Romano (1985) finds a statistically significant price increase around the reincorporation announcement in a sample of firms that reincorporate for various reasons. However, in the subsample of 43 firms who reincorporated as an antitakeover device she found a small statistically insignificant price increase at the announcement.
of a reincorporation. The evidence is not conclusive but it does indicate that reincorporating in a new state does not on average harm shareholders.

Reduction in Cumulative Voting Rights. Cumulative voting makes it possible for a group of minority shareholders to elect directors even if the majority of shareholders oppose their election. Dissidents in hostile takeovers and proxy contests will often attempt to elect some board members through the use of cumulative voting. Bhagat and Brickley (1984) examine the stock price reaction to 84 management sponsored charter amendments that either eliminate or reduce the effect of cumulative voting. Since these amendments decrease the power of dissident shareholders to elect directors, they increase management's ability to resist a tender offer. Bhagat and Brickley find statistically significant negative abnormal returns of about one percent at the introduction of these charter amendments.

Defensive Measures That Do Not Require Shareholder Approval

Four general kinds of defensive measures do not require voting approval by shareholders: general litigation, greenmail, poison pills, and the use of state antitake-over laws. With the exception of general litigation, these defensive actions are associated on average with negative stock-price reactions indicating that in most cases they are economically harmful to stockholders of companies whose management enacted them.

Litigation by Target Management. As described earlier, litigation can be expected to hurt shareholders of some target companies by eliminating takeovers and to help shareholders of other companies by giving their management time and weapons to cut a better deal. Jarrell (1985) examines 89 cases involving litigation against a hostile suitor based on charges of securities fraud, antitrust violations, and violations of state or Federal tender offer regulations. His results show that litigation usually delays the control contest significantly and that litigating targets are frequently the beneficiaries of auctions. The 59 auction-style takeovers produced an additional 17 percent excess return to shareholders over the original bid, while the 21 targets that remained independent lost nearly all of the original average premium of 30 percent. Overall, Jarrell concludes that this evidence cannot reject the theory that on average target litigation is consistent with shareholder wealth maximization.13

However, harm can result from certain types of defensive litigation. Netter (1987) finds that litigation based in part on a claim alleging the filing of a false Schedule 13D Item 4 can be detrimental to target shareholders. In an exhaustive sample of all cases where target management filed a suit alleging (among other things) that a bidder filed a false 13D Item 4, he finds that target shareholders are better off if their management loses the case than if they win. If the target firm wins the case its share price declines by a significant amount (an abnormal return of negative 3.37 percent in the two-day window around the decision) while if the bidder wins, the stock price of the target firm increases by a significant amount (positive 3.15 percent abnormal return in the two-day window.

13 Jarrell also notes that while defensive litigation redistributes premiums it also, by reducing incentives to engage in takeovers and through the cost of the litigation itself, can reduce social welfare.
**Targeted Block Stock Repurchases (Greenmail).** Greenmail occurs when target management ends a hostile takeover threat by repurchasing at a premium the hostile suitor's block of target stock. This controversial practice has been challenged in federal courts, in congressional testimony, and in SEC hearings, and it has brought negative publicity both to payers and to receivers of greenmail. In reviewing earlier studies, Jensen and Ruback (1983) conclude that greenmail repurchases are associated with significantly negative abnormal stock returns for the shareholders of the repurchasing firms (probably because they eliminate potential takeover bids) and significantly positive abnormal stock returns for shareholders of the selling firms. These negative effects of greenmail repurchases contrast sharply with the normally positive stock-price effects associated with nontargeted offers to repurchase a company's own stock.

Since then, three new empirical studies have contributed to a more complex and less conclusive discussion of greenmail transactions. These studies indicate that it is not necessarily in the interests of shareholders to ban greenmail payments. Such a ban has the potential to discourage outside investment in the potential target's stock by investors anticipating greenmail payments and hence reduces the incentives of outsiders to monitor managers.

Mikkelson and Ruback (1985a) examine 39 cases of greenmail (based on 13Ds filed during 1978–80). They find a significant stock-price loss of 2.3 percent upon the announcement of the repurchases. However, they also report an average gain of 1.7 percent over the entire period including the original stock purchase by the hostile suitors. Holderness and Sheehan's (1985) outcome-type study includes 12 cases of greenmail, and they report a pattern of returns consistent with the evidence of Mikkelson and Ruback. Although the greenmail transaction itself harms target shareholders, the net returns to stockholders resulting from the initial purchase and related events is positive. A more comprehensive sample of targeted block stock repurchases is covered by OCE (1984). This study includes 89 cases of large repurchases (blocks greater than 3 percent of the outstanding common stock) from 1979 to 1983. The initial announcement of investor interest induces a positive return averaging 9.7 percent, while the greenmail transaction is associated with a stock price loss of 5.2 percent.

**Poison Pills.** Since its introduction in late 1982, the “poison pill” has become the most popular and controversial device used to defend against hostile takeover attempts. Poison pill describes a family of shareholder rights agreements that, when triggered by an event such as a tender offer for control or the accumulation of a specified percentage of target shares by an acquirer, provide target shareholders with rights to purchase additional shares or to sell shares to the target at very attractive prices. These rights, when triggered, impose significant economic penalties on a hostile acquirer.

Poison pills are considered very effective deterrents against hostile takeover attempts because of two striking features. First, pills can be cheaply and quickly altered by target management if a hostile acquirer has not pulled the trigger. This feature pressures potential acquirers to negotiate directly with the target's board. Second, if not redeemed, the pill makes hostile acquisitions exorbitantly expensive in most cases. As an obstacle to hostile takeover attempts, the poison pill is unmatched
except by dual-voting recapitalizations or direct majority share ownership by incumbent management. The concern over poison pills was heightened by the Delaware Supreme Court’s 1985 ruling in *Moran v. Household International*\(^{14}\) that poison pills do not require majority voting approval by shareholders.

The most comprehensive study of poison pills is Ryngaert (forthcoming), which is an outgrowth of OCE (1986). The Ryngaert study features an exhaustive collection of 380 poison pills adopted from 1982 to December 25, 1986. Over 80 percent of these were adopted after the *Household* decision. Ryngaert divides his sample into discriminatory pills (the most restrictive) and flip-over pills (the least restrictive). He also accounts for whether firms are subject to takeover speculation and whether confounding events occur close to the announcement of the pill that contaminate the data. The stock-price effect over the 283 cases with no confounding events is a statistically significant \(-.34\) percent. Focusing on 57 cases subject to takeover speculation, the average loss is 1.51 percent, also statistically significant. These results are supported by the findings of Malatesta and Walkling (forthcoming).

Discriminatory pills have more harmful effects on shareholder wealth than do flip-over pills. Also, the discriminatory pills that threaten the hostile suitor with severe dilution have become increasingly popular. Ryngaert reports that pill-adopting managements own a surprisingly low average of around 3.0 percent of their firms’ outstanding stock. This fact, together with high institutional holdings, suggest that many of these firms would have difficulty obtaining shareholder voting approval if it were required.

Ryngaert also examines the stock-price effects of important court decisions emanating from legal battles involving pill defenses during 1983–86. He shows that 15 of 18 pro-target, pro-poison pill decisions have negative effects on the target’s stock price, and 6 of 11 pro-acquirer decisions have positive effects on the target stock price. This evidence is inconsistent with the theory that pill defenses improve shareholder wealth by strengthening management’s bargaining position in control contests.

Although these losses are not large in percentage terms, these empirical tests suggest that poison pills are harmful to target shareholders.

**State Antitakeover Amendments.** In addition to the Williams Act at the Federal level, tender offers are regulated by many states. So-called first-generation state antitakeover regulations are antitakeover laws that were passed by the states before the 1982 Supreme Court decision in *Edgar v. Mite*.\(^{15}\) The Jarrell and Bradley (1980) study of state and Federal regulation of tender offers finds that first generation state regulations significantly increase the premiums paid in tender offers. Smiley (1981) illustrates the deterrent effects of these early state takeover regulations.

However, first generation antitakeover laws were generally extinguished in *Edgar v. Mite* when the Supreme Court ruled the Illinois antitakeover law unconstitutional. Justice White’s opinion held the Illinois takeover statute was preempted by the Williams Act and constituted an undue and direct burden on interstate commerce. As

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a result over 20 states passed second generation antitakeover laws to attempt to pass constitutional muster under the Supreme Court’s reasoning. While some of them have also been ruled unconstitutional, the Supreme Court in 1987 (*CTS v. Dynamics Corp. of America*) ruled the Indiana antitakeover law constitutional. This decision already is leading states to pass third generation antitakeover laws that would be constitutional under the CTS reasoning.

Two recent studies, Ryngaert and Netter (1987, based on OCE, 1987c) and Schumann (1987) provide more direct evidence on the wealth effects of state antitakeover regulations. Ryngaert and Netter examine the stock price effects of the passage of the Ohio antitakeover law on shareholders of firms chartered in Ohio. This act was passed during (and apparently motivated by) Sir James Goldsmith’s attempted hostile takeover of Goodyear. They find that the passage of the law was accompanied by a significant stock-price loss of up to 3.24 percent to the shareholders of firms incorporated in Ohio with less than 30 percent inside ownership. This evidence on the impact of state takeover laws is supported by Schumann (1987) who finds a decline of approximately one percent to shareholders of New York firms on the announcement and passage of a New York antitakeover law. While these laws potentially could be beneficial to the individual states (if jobs are kept in the state by preventing takeovers), shareholders are harmed by state antitakeover regulations.

**Summing Up Defensive Tactics**

Four years ago Jensen and Ruback (1983) reviewed empirical studies of antitakeover charter amendments, shark repellents, changes of incorporation, and greenmail. They conclude (p. 47): “It is difficult to find managerial actions related to corporate control that harm stockholders; the exception are those actions that eliminate an actual or potential bidder, for example, through the use of targeted large block repurchases or standstill agreements.”

Since their review, the defensive arsenal available to target management has been strengthened. These defensive tactics have been developed through a fascinating process of sequential innovations, as specific defenses arise to counter improved bidder finances and other tactics. In 1983, the now common fair-price amendment was a novel idea and the poison pill was not yet invented. Financial economists in academia and government have kept close pace with these developments, providing timely analyses of new charter amendments, poison pill defenses, greenmail transactions, and so on. While Jensen and Ruback were correct in predicting this area would be a “growth industry,” we cannot reiterate their then-accurate conclusion that harmful defensive tactics are rare.

**Conclusion**

In the 1980s, the market for corporate control has been increasingly active, and the quantity of output of academic researchers studying corporate control questions

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has mirrored the market activity. This review has confirmed the basic conclusions of Jensen and Ruback's (1983) review article and has shed light on some questions Jensen and Ruback were forced to leave unanswered. Financial researchers continue to find larger premiums being paid to target shareholders for later tender offers than for earlier tender offers. Acquirers, however, receive at best modest increases in their stock price, and the winners of bidding contests suffer stock-price declines as often as they do gains. This pro-target division of takeover gains appears to be partially a result of improved defensive tactics that can effectively delay execution of the bid and allow the target to receive improved bids from others or fashion a defensive restructuring and stock buyback. The evidence further suggests that the premiums in takeovers represent real wealth gains and are not simply wealth redistributions.

Prominent in the 1980s are new studies of defensive measures, such as antitakeover charter amendments, targeted block stock repurchases (greenmail), dual-voting recapitalizations, state antitakeover laws, and poison pills. The general finding, although it is far from conclusive, is that defensive measures that require shareholder voting approval are less likely to be harmful to shareholder wealth than are defensive measures not subject to shareholder approval. Fair-price charter amendments and dual-class recapitalizations that require shareholder approval are not shown to be harmful to stock value, while poison pills and greenmail-type repurchases that do not need shareholder approval appear on average to reduce shareholder value. However, some proposals that require a favorable vote from shareholders to implement (e.g., supermajority provisions and the elimination of cumulative voting) on average appear to reduce shareholder wealth. These findings raise serious questions about whether the business judgment rule is operating too broadly as a shield for defensive actions by target managements.

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[Footnotes]

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