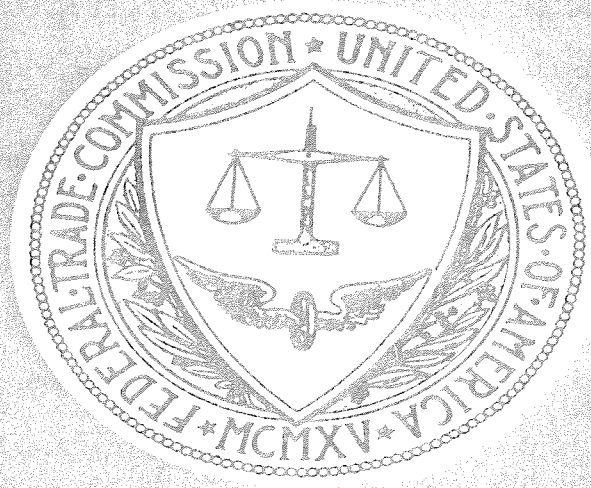
STATE REGULATION OF TAKEOVERS AND SHAREHOLDER WEALTH:

The Effects of New York's 1985 Takeover Statutes



State Regulation of Takeovers and Shareholder Wealth: The Effects of New York's 1985 Takeover Statutes

by

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> "New York's takeover reforms recognize changes in the workings of the market, not by "protecting" management but by safeguarding the rights of corporate shareholders and employees."
>
> Raymond T. Schuler
> President,
> Business Council of New York State
>
> Quoted from "Letters to the Editor," The Wall Street Journal, August 13, 1986.

I. Introduction: Takeovers and the Market for Corporate Control

Economists have long recognized that free and voluntary exchange in competitive markets is generally the best insurance that the resources of a society are allocated to their most highly valued uses. Investors buy and sell corporate assets in highly competitive and efficient markets. In the "market for corporate control" managers compete for the right to control these assets. In theory, this competition for the control of

corporate assets can provide a powerful check on inefficient managers. Corporate assets which are inefficiently managed will have a lower value and, therefore, be attractive targets for takeover.[1] As noted by Jensen and Ruback (1983), "...competition among managerial teams for the rights to manage resources limits divergence from shareholder wealth maximization by managers and provides the mechanism through which economies of scale or other synergies available from combining or reorganizing control and management of resources are realized."[2]

By forcing management to employ corporate assets efficiently, the market for corporate control also can provide substantial benefits to consumers. The efficient management of society's resources insures that the real cost of the goods and services purchased by consumers is as low as possible. In this sense,

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1 The prospect of losing one's job following a takeover is one, but certainly not the only, check on managerial performance. For example, the managerial labor market also provides incentives for managers to perform well since managers who perform poorly will face declining employment prospects. See Fama (1980).

2 Jensen and Ruback (1983), p. 6.

competition in capital markets for the control of corporate assets, like competition in product markets, acts to maximize consumer welfare.

Managers of one firm may use a number of different methods to take control of the assets of another (target) firm. The most common methods are mergers and tender offers.[3] Mergers may occur when one corporation completely absorbs another, or when two firms combine to form a new firm. The acquiring firm negotiates d ect with the target's management, and the merger must be approved by the target's board of directors before being submitted to shareholders for approval. Since mergers involve changes in corporate charters, they are traditionally regulated by states in their business corporation codes.

Tender offers are offers made directly to shareholders to buy shares at a specified price. Target managers may voice support for or opposition to the

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[3] A third method by which takeover may occur is through proxy contests in which the votes of shareholders are solicited in order to elect a new board of directors. Private sales of large blocks of stock may also lead to changes in managerial control.

offer; however, the decision to tender shares is made by individual shareholders. Over the last ten years a number of states have passed takeover statutes which have greatly increased the power of target managers to block or delay "hostile" tender offers, i.e., offers which they oppose. The rationale behind these statutes is that such delaying tactics may benefit target shareholders by enabling them to receive higher premiums or their shares. However, by raising the costs of cquiring corporate assets, these statutes may also revent otherwise profitable acquisitions. Such an utcome harms shareholders of firms which would have een acquired by denying those shareholders the premiums hich they would have otherwise obtained. By raising he costs of takeovers, these statutes may also act to protect inefficient managers.

The federal government began regulating tender offers with the passage of the Williams Act during the summer of 1968.[4] The Williams Act was clearly designed with the intention of protecting shareholders. Its

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[4] Pub. L. No. 90-439, 82 Stat. 454 (July 29, 1968).

major provisions 1) establish a minimum offer period in order to give shareholders adequate time to consider the merits of an offer, 2) require the public disclosure of the identity and intentions of the offeror, and 3) prohibit fraudulent and deceptive acts with respect to the tender offer.

At the time the Williams Act was passed, Virginia was the only state regulating takeover bids, having begun doing so the previous March. During the ten years following the passage of the Williams Act, 35 additional states passed laws regulating tender offers.[5] The state statutes, however, consistently went well beyond the provisions in the Williams Act, increasing the power of incumbent managers to delay and prevent takeovers.[6]

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5 Jarrell and Bradley (1980), p. 377.

6 Congress specifically intended that the Williams Act not be used as a weapon by management to discourage takeover bids. As noted by Senator Williams, "We have taken extreme care to avoid tipping the scales either in favor of management or in favor of the person making the takeover bids." (113 Cong. Rec. 24664, 1967, quoted by Justice White in Edgar v. MITE, 457 U.S. 624, 1982). In the MITE decision, Justice White asserted that this policy of evenhandedness "represented a conviction that neither side in the contest should be extended additional advantages vis-a-vis the investor, who if furnished with additional information would be in a position to make his own informed choice."

This trend may have been abated, at least for a short time, when the Supreme Court, in Edgar v. MITE,[7] found the broad provisions contained in Illinois' takeover statute unconstitutional. However, in the wake of the MITE decision, a new, "second generation" of state takeover statutes have been passed in various states.[8]

This study examines the effect of two second generation takeover statutes passed by the New York State Legislature during 1985. The first of these bills passed overwhelmingly in the legislature, but was vetoed on technical constitutional grounds by the Governor. The second bill was proposed by the Governor and became law. Supporters of these statutes argued, among other things, that both laws would protect shareholders; therefore, this study will attempt to measure the direct effect of the passage of these two bills on shareholder wealth.

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7 Edgar v. MITE, 457 U.S. 624, 1982.

8 For a detailed discussion of the provisions found in most state statutes prior to 1980, see Jarrell and Bradley (1980). Romano (1986) discusses the provisions found in the second generation statutes passed after MITE.

Past studies of state and federal regulations of takeovers have examined the effects of the regulations on samples containing only firms which were actually acquired. The approach of this study is quite different. This study examines the effects of these regulations on a sample of firms which are all potential targets governed by the New York statutes. The purpose of this approach is to measure the net effect of any potential gains to shareholders resulting from expected increases in premiums and any potential losses to these same shareholders resulting from the entrenchment of current management and the dissuasive effects of the higher costs of acquiring corporate assets.

The results indicate that these laws harm shareholders on average. We find that the sample of 94 firms studied experienced nearly a 1% decline in equity value in response to the announcement of the Governor's bill. This decline in equity value translates into a capital loss to shareholders of approximately $1.2 billion.

II. Previous Studies of the Regulation of Tender Offers

The Williams Act contains three major provisions. The first of these is a minimum offer period which requires that all tender offers be left open for a minimum of twenty days. Target shareholders may withdraw their tender within the first fifteen days of the offer. If the offer is oversubscribed during the offer period, the offeror is required to purchase shares on a pro rata basis.

The second major provision of the statute requires disclosures. Anyone purchasing five percent of a company's stock must make that fact public within ten days and disclose his intentions by filing a Schedule 13(D) disclosure statement with the SEC. In the case of a purchase of shares through a public tender offer, the offeror must file the disclosure statement with the SEC before the tender offer is publicly announced. If the offeror seeks to acquire control of the target, then the disclosure statement must describe any plans to liquidate the target, sell any of the target's assets, merge the target, or change the target's corporate

structure.

The third major provision prohibits material misstatements, omissions or other deceptive acts in connection with the tender offer. An important part of this antifraud provision is that it gives target management standing to sue to delay the execution of the tender offer.

In their study of tender offers made before and after the passage of the Williams Act, Jarrell and Bradley (1980) propose a model in which swift and secretive takeovers are a means of appropriating the returns to a very specialized form of investment. In their model, firms invest in information and skill that determine the success and productivity of corporate combinations. The disclosure requirements and minimum offer periods characteristic of state and federal takeover statutes allow competing bidders to "free ride" on the original bidder's efforts by providing information and time at no cost. Swift and secretive takeovers are a market solution to what is essentially a public goods problem, the public good being information

concerning the precise sources of the economic gains from corporate combinations. The disclosure provisions and minimum offer periods required by the regulations force successful bidders to pay higher premiums to outbid the increased competition from the free riders. These higher premiums have two effects: 1) they deter some otherwise profitable acquisitions, and 2) they discourage investment in resources necessary for successful takeovers by lowering the return to those investments. Consequently, while the higher premiums may benefit the shareholders of successfully acquired targets, they harm the shareholders of firms not acquired due to the deterrent effect and they reduce the productivity of takeovers which do occur.

The deterrent effect may also harm shareholders and consumers by acting to insulate managers from the threat of takeover. Over fifty years ago, Berle and Means (1932) proposed that the separation of ownership from control allows managers of corporations to pursue goals other than the maximization of the value of the firm, maximizing their own utility rather than profits. A

common retort to Berle and Means is that as long as capital markets operate efficiently, managers are forced to maximize profits. If assets are "undervalued" due to poor management, they will be attractive targets for profit-maximizing investors. Consequently, only by maximizing profits will managers insure the survival of their firms and their jobs. However, if state and federal regulations deter takeovers, they will also protect managers from the rigors of competitive capital markets and may enable them to pursue goals other than the maximization of value. Consequently, the entrenchment of management can harm shareholders since the value of their assets will not be as great as it would be otherwise.[9] Furthermore, by protecting

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[9] The entrenchment of management <u>can</u> hurt shareholders by allowing managers to pursue goals other than the maximization of profits; however, shareholders are not necessarily hurt by actions that protect managers from takeovers. Shareholders may have legitimate objections to hostile takeovers and desire long-term contracts with incumbent management. For example, shareholders of several firms have approved "shark repellents," "poison pills," and other defensive tactics to ward off hostile takeovers. Nevertheless, the shareholders of the vast majority of firms have not adopted anti-takeover charter amendments and apparently do not feel that such measures are in their best interests. For a discussion of the effects of "poison pill" takeover defenses, see "The Effects of Poison Pills on the Wealth of Target Shareholders," Office of

inefficient management, takeover regulations waste society's resources, increasing the price consumers must pay for goods and services.

In contrast to the model presented by Jarrell and Bradley, Bebchuk (1982) argues that the bidding contests resulting from the information disclosures, the minimum offer periods, and the increased power of managers to delay takeovers created by state and federal takeover regulations provide substantial benefits to shareholders. According to Bebchuk, the "auction" of corporate assets resulting from these regulations insures that target firms are acquired by the bidders having the highest valued use for the targets. Consequently, he argues that no acquisition should occur before potential competing bids can be advanced, since "the initial offeror may not be the firm that attaches the highest value to the target's assets."[10] Bebchuk further asserts the increased cost to bidders resulting

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the Chief Economist, Securities and Exchange Commission (1986).

[10] Bebchuk (1982), p. 1041.

from the bidding contests does not significantly reduce the number of takeovers which occur. Thus, Bebchuk argues that the expected gains to shareholders should increase as a result of the auctions facilitated by takeover regulations.

In their empirical analysis, Jarrell and Bradley found that the federal and state regulation of tender offers significantly increased the premiums acquiring firms paid for their targets. The Williams Act increased tender premiums by 20 percent and the state statutes increased the premiums by another 20 percent. Guerin-Calvert, McGuckin, and Warren-Boulton (1986) have recently re-examined the effects of state and federal regulation of tender offers. The effects of the regulations on premiums paid to successfully acquired target shareholders that they report are of similar magnitude and significance as those previously reported by Jarrell and Bradley. Guerin-Calvert et al. also find that the regulations greatly increased the incidence of multiple bidders. This finding supports Jarrell and Bradley's assertion that the information disclosures and

delays associated with state and federal regulation of tender offers allow some firms to free ride on the informational investments of the original bidding firm.

The evidence presented by Jarrell and Bradley and Guerin-Calvert et al. indicates that state and federal takeover regulations have significantly increased the premiums paid to shareholders of successfully acquired firms. However, since these studies examined the effects of the regulations only on actual takeover attempts, they cannot measure the expected gains (or losses) to shareholders in general. Consequently, these results cannot distinguish between the effects predicted by Jarrell and Bradley (a net loss, on average, to shareholders despite the gains to successfully acquired target shareholders) and the effects predicted by Bebchuk (a net gain, on average, to all shareholders). In Section IV, we describe a method which should distinguish between these opposing views and measure the net effect of both the potential gains from higher premiums and the potential harm from the deterrence and entrenchment effects. Before discussing this method,

however, Section III describes in detail the two takeover statutes passed by the New York State Legislature during 1985 which are the subject of this study.

III. New York's 1985 Takeover Statutes

The New York State Legislature passed two takeover statutes during 1985. The first of these statutes was introduced in the New York State Assembly on March 26 and in the State Senate on May 8.[11] It passed overwhelmingly in the state Assembly on June 27 and in the state Senate on June 28, only to be vetoed by the Governor on August 13.[12] The Governor then proposed his own takeover statute on October 30. This bill passed in the legislature on December 10 and was signed by the Governor on December 16.

The original bill contained two of the three provisions characteristic of "second generation"

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11 The bill was written and submitted to the Legislature by the New York Business Council. Both the Speaker of the Assembly, Democrat Stanley Fink, and the State Senate's Republican leader, Warren Anderson, supported the bill. Aggressive lobbying by CBS resulted in changes in the bill which insured that Ted Turner's pending takeover bid for CBS would be covered by the bill's provisions.

12 The lobbying efforts of CBS were in part responsible for the governor's veto. In the statement which Governor Cuomo issued when he vetoed the bill he noted that "the felony provision in the amended Security Takeover Disclosure Act, if applied to pending tender offers, would be an ex post facto penalty and therefore patently unconstitutional." (See "Veto Jacket #80," p. 4, available from the Executive Chamber, State of New York.)

takeover statutes.[13] The first of these is a "control share" provision. This provision requires that a noncash "control share acquisition"[14] be approved by a majority of disinterested board members or by a majority of disinterested shareholders[15] and two-thirds of all shareholders.[16] The second major provision of the statute is a "redemption rights" provision. This

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13 See Romano (1986), pp. 4-12.

14 The bill defined a "control share acquisition" as the acquisition of shares, that when added to any other shares owned or controlled by the acquirer, result in control of a new range of voting power. The bill defined three ranges of voting power: 1) at least 20% but less than 34% of a company's shares, 2) at least 34% but less than a majority of shares, and 3) at least a majority.

15 Disinterested board members and shareholders are ones who are not a party to the purchase of the tendered shares.

16 Recent U.S. Court of Appeals decisions for the Sixth and Seventh Circuits as well as the U.S. District Court for Minnesota have found similar control share statutes in Ohio, Indiana, and Minnesota unconstitutional under both Commerce and Supremacy Clause grounds. (See Fleet Aerospace Corp v. Holderman, 18 SRLR 968 for the Sixth Circuit decision concerning the Ohio statute; Dynamics Corp. of America v. CTS Corp., 18 SRLR 901 for the Seventh Circuit decision concerning the Indiana statute; and Gelco Corp. v. Coniston Partners, Civil No. 3-86-847 DC Minn, 11/10/86 for the District Court decision concerning the Minnesota statute.) In October 1986 the U.S. Supreme Court agreed to review the Seventh Circuit Court of Appeals decision striking down the Indiana law. (Nos. 86-71 and 86-97 US SupCt, 10/6/86) As of this writing, the Supreme Court decision in this matter has not been issued.

provision required that, on demand, an acquirer redeem the shares of takeover opponents for cash at the highest of alternative formulations of the shares' "fair market value."

Both of these provisions could increase the cost of takeovers substantially. As noted by Romano, the provisions of takeover statutes that offer a majority of disinterested board members the power to veto a hostile takeover "blur the statutory distinctions between takeover bids and mergers or asset sales," substantially increasing the power of the incumbent board as well as "increasing the incentives of bidding firms to make side payments, to the extent that obtaining board approval is cheaper than meeting either the fair price or supermajority vote requirements."[17] While bidding firms would still be able to take their offers directly to the stockholders, the redemption rights provision would greatly reduce the incentives for stockholders to tender their shares since if the offer is successful, the acquiring firm must offer to buy the shares of the

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[17] Romano (1986), p. 7.

minority stockholders with cash for at least the value of original offer, and possibly for more.

The current law which was proposed by the Governor of New York consists of a very strong variation of the third type of provision characteristic of second generation takeover statutes, a "fair price" provision. This type of antitakeover regulation does not regulate tender offers per se, only "corporate combinations," which generally follow successful tender offers. The fair price provision is intended to prevent two-tier takeovers in which shareholders who tender their shares early receive a higher price than those who are forced to exchange their shares in a subsequent merger. The New York law prohibits for five years anyone buying at least 20% of a firm's shares from engaging in any business combination with the target unless approval is granted by the board of directors of the target in advance of the stock purchase. Under the bill's definition of business combination, the acquirer would not be able to merge or make any sale, lease, exchange, mortgage, pledge, transfer, or other disposition of the

target's assets over this five year period.[18] At the end of the five year period, a merger would still require approval of a majority of the disinterested shareholders or the fulfillment of the fair price provision in which all disinterested shareholders are paid the same price determined by a formula.

As noted by Romano (1986), fair price statutes aimed at preventing two-tier takeovers codify the most common type of antitakeover charter amendment; however, the five-year ban on business combinations imposed by the New York statute is much stronger and more restrictive than either the fair price provisions found in corporate charters or those adopted in most other states' takeover regulations.[19]

As with the first bill, this statute clearly enhances the power of the incumbent board of directors. Moreover, while the statute does not directly regulate

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18 New York Business Corporation Law, Article 9, section 912(a)(5).

19 Indiana's takeover statute (see footnote 16) also contains a five-year waiting period. Besides New York and Indiana, Connecticut, Georgia, Kentucky, Louisiana, Maryland, Michigan, Mississippi, Virginia, Washington, and Wisconsin have takeover regulations which include fair price provisions.

tender offers, it does increase their costs. Bidding firms typically finance acquisitions by issuing debt which is often, at least partially, retired after the acquisition by the sale of some of the acquired assets. If shareholders override the objections of managers and allow a bidding firm to successfully acquire 20% or more of a targets' shares, any debt issued to finance the acquisition could not be retired through the sale of any of the acquired assets for a minimum of five years, substantially increasing the interest burden borne by the bidder. If the acquisition is attractive to bidders because the target's assets have not been properly managed, then by preventing a successful bidder from taking control of the target, the statute impedes the adoption of any efficiency enhancing changes, reducing the profitability of the acquisition to the bidder as well as imposing significant social costs. By discouraging acquisitions that are profitable only if the acquired firm is "broken up" and sold, the statute interferes with the market mechanism that generally serves to shift assets to their most highly valued uses.

IV. Methodology

The technique used to measure the effects of the two statutes on shareholder wealth consists of a variation of the "event study" method. This method, also referred to as event analysis employs capital market return data to measure the impact of actions (events) which may affect the value of securities.

Event analysis measures the impact of an event by measuring the "abnormal" return caused by the event. This abnormal return is the portion of a firm's stock return not explained by a model generating normal, expected returns. Since information concerning an event often leaks to the public and influences share prices before the event is formally announced, abnormal returns are generally estimated for some period or "window" around an event announcement.

Event analysis has been used to measure the impact of such actions as mergers, tender offers, changes in firms' accounting methods, changes in firms' dividends,

and various state and federal regulations.[20] The events of interest in this study are the announcement of the two New York takeover statutes and the announcement of the Governor's veto of the first statute. If the net effect of the statutes was to hurt shareholders, then the abnormal return accompanying their announcements should be negative, and the abnormal return accompanying the Governor's veto of the first bill should be positive. If the net effect of the two statutes was to protect shareholders, then the abnormal return from these events should have the opposite signs.

This method differs considerably from that used in past studies of state takeover statutes. In the papers by Jarrell and Bradley and Guerin-Calvert et al. it is not clear whether the harm to the shareholders of potential targets outweighs the gains accruing to the shareholders of successfully acquired targets since these papers examine only the extent to which the

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[20] For an overview of applications of event analysis to the study of regulations see Schwert (1981). Jensen and Ruback (1983) survey the event analysis literature concerning the study of mergers and acquisitions.

premiums paid to acquired firms' shareholders rise as a consequence of the regulations.[21] In this study, we measure the net effect of New York's statutes on all shareholders, not merely those of firms actually acquired.

In order to measure abnormal return, we need to adopt a model generating expected "normal" return. Let R_{it} be the return of a share of stock of the ith firm in period t and R_{mt} be the return of the market portfolio for the same period. We assume that the joint distribution of the returns on all assets is multivariate normal. Therefore, the joint distribution of R_{it} and R_{mt} is bivariate normal and the relationship between R_{it} and R_{mt} can be expressed as:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \epsilon_{it}. \qquad (1)$$

Equation (1) is commonly referred to as the market

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[21] While the net effect to shareholders may be ambiguous, the cost to society is not. The increased premiums paid to target shareholders represent transfers from the shareholders of the bidding firms to the shareholders of the target firms, not increases in overall value. Thus, to the extent that the higher premiums deter otherwise profitable, efficiency enhancing takeovers, they cause a net loss to society (assuming, of course, a welfare standard based on economic efficiency).

model.[22] α_i and β_i are both constants, and ϵ_i is a normally distributed, random disturbance with mean zero and variance σ^2.[23] The ordinary least squares (OLS) estimate of the β_i coefficient equals the ratio of the covariance of the return on asset i, R_i, with the return on the market portfolio, R_m, to the variance of the return on the market portfolio. This ratio is of particular importance in modern financial theory. It measures the "systematic risk" of asset i -- the component of the fluctuation of R_i which is correlated with the fluctuation of the economy as a whole, i.e. correlated with R_m, and, therefore, cannot be avoided through diversification.[24]

Equation (1) follows directly from the assumption that the joint distribution of R_{it} and R_{mt} is bivariate normal, which follows directly from the assumption that

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22 A formal derivation of the market model can be found in Fama (1976), Chapter 3.

23 The variance of ϵ_i, σ^2, equals the variance of R_i which is assumed to be constant through time.

24 For a more complete discussion of the systematic and unsystematic (random) components of risk, see Copeland and Weston (1983), pp. 191-194.

the joint distribution of the returns of all assets is multivariate normal. The assumption that asset returns follow a joint multivariate distribution implies that the joint distribution of any two linear combinations of returns will be bivariate normal.[25] Consequently, we can replace R_{it} in equation (1) with R_{pt}, where R_{pt} is the return on any portfolio of assets contained in the market (such as a portfolio of firms governed by the New York takeover regulations).

The market model has been used to estimate expected return in a large number of event studies, and it will be used for that purpose here.[26] The abnormal return is measured through the inclusion of dummy variables in equation (1) such that

$$R_{pt} = \alpha_p + \beta_p R_{mt} + \sum_{w=1}^{W} \gamma_{wp} D_{wt} + \epsilon_{pt}. \qquad (2)$$

D_{wt} is a dummy variable equal to one during announc window w and zero otherwise, and R_{pt} is the daily return on an equally weighted portfolio of stocks of firms

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25 See Fama (1976), chapter 3.

26 For a discussion of the use of the market model in event studies, see Brown and Warner (1980, 1985).

governed by New York's takeover regulations.

γ_{wp} measures the average level of abnormal performance of the portfolio of New York firms during announcement window w; that is, it measures the average deviation of the portfolio's actual return from the expected normal return predicted by equation (1). A non-zero γ_{wp} indicates that announcement w resulted in a change in the value of the portfolio which can not be explained by changes in the stock market as a whole (i.e. changes in R_m) and which is attributable to the event announcement. A positive γ_{wp} indicates that the event, on average, increased the values of the firms in the portfolio and a negative γ_{wp} indicates that the event, on average, decreased the values of the firms in the portfolio. If N_w is the number of days in window w, then $N_w\gamma_{wp}$ is the sum of the abnormal returns over window w. This sum is generally referred to as the cumulative abnormal return (CAR).[27]

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[27] Since the CAR equals $N_w\gamma_{wp}$, the variance of the CAR is N_w^2 times the variance of γ_{wp}. Consequently, the standard error of the CAR, STD(CAR), is N_w times the standard error of γ_{wp}, STD(γ_{wp}). This implies that the t-statistic for the CAR equals the t-statistic for γ_{wp} since $\gamma_{wp}/STD(\gamma_{wp}) = N_w\gamma_{wp}/N_wSTD(\gamma_{wp}) = CAR/STD(CAR)$.

The levels of the estimated γ_w's tend to be very sensitive to the number of days contained in the event window. The efficiency of the stock market insures that stock prices react quickly to new information; consequently, in the absence of pre-announcement leaks, optimal window lengths should be very narrow. If we knew the exact date at which new information first became available to investors, then the optimal window length should be one day (the day that investors f___ obtained the new information) since the full impact of the announcement should occur on that day. A wider window, by including days which were not pertinent to the event, would merely add "noise" to the estimate of γ_w. Since abnormal performance should, on average, be zero on days not pertinent to the event, a wider window length in this situation would, on average, result in adding zeros to the sum of abnormal returns. Since γ_w is the average level of abnormal performance over window w, including days in the window which are not pertinent will lower the absolute value of the estimated γ_w. Even though the sum of the abnormal returns, the CAR, should

not be affected by adding zeros, the wider window length increases the standard error of the CAR, lowering its level of significance.

In general, one will not know the exact day at which investors first became aware of information concerning an event. Leaks of information before the formal announcement of an event are common. These may occur days, weeks, or months before the announcement. In the presence of substantial pre-announcement leaks of information, event windows should be fairly wide in order to capture the full impact of the event. However, since wider event windows may introduce more noise in the estimate of abnormal return, if we have good reason to believe that leaks were not substantial, narrow windows are preferred since they provide more efficient (lower variance) estimates of abnormal return. Thus, the length of the announcement window depends crucially on the quality of information concerning the point in time that investors first became aware of pertinent information.

Even in the absence of pre-announcement leaks, one

may not know exactly when information concerning an event first affects security prices. Knowledge of the time of day at which an announcement is made may be crucial. If an event is announced after the stock market has closed, then security prices cannot be affected by the event until the day after the announcement is made. On the other hand, if the announcement is made before the market closes, prices may be affected on the announcement day. Therefore, a minimum length announcement window generally needs to be at least two days wide.

V. Data

The sample portfolio contains the returns of 94 firms governed by the two takeover statutes and listed on either the New York or American Stock Exchanges.[28] Each of these firms is incorporated in New York and has its principal executive offices there. Moody's 1985 Manual series and the 1985 NRPC Directory of Corporate Affiliations were used to select an initial sample of 234 firms incorporated in New York and listed on one of the two exchanges. Standard and Poor's COMPUSTAT file and the NRPC Directory were used to determine the location of these firms' principal executive offices. Firms incorporated in New York but with headquarters outside of the state were excluded from the final sample since they are not governed by either of the statutes. Banks and bank holding companies, savings and loan institutions, insurance companies, and public utilities were also excluded from the sample since they too are explicitly excluded from the statutes' provisions.

Daily stock returns for each firm in the sample

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[28] These firms are listed in the appendix.

come from the Center for Research in Security Prices (CRSP) daily return file. The return on the CRSP equally weighted index of the New York and American Stock Exchanges is used as the proxy for the return on the market portfolio, R_m.[29]

[29] Event studies using the market model to measure normal return generally use either an equally weighted index as a proxy for the market or a value weighted index. Brown and Warner (1980) have examined the power of the method to detect abnormal return using both types of indices and find that the equally weighted index performs marginally better than the value weighted index.

VI. Results

This study is concerned with the stock marke reaction to three events. These events are 1) the announcement of the first takeover bill, 2) the announcement of the Governor's decision to veto this bill (August 13), and 3) the announcement of the Governor's own takeover bill (October 30). The dates at which investors first became aware of the Governor's veto of the first bill and his proposal of the second bill are known with some degree of certainty. Both of these events were covered in the press at the time which they occurred. However, we have been unable to locate any single specific event for the announcement of the original bill.

Neither the introduction of the Assembly bill (on March 26) nor the introduction of Senate bill (on May 8) was covered by the press. The New York Times first discussed the bill in a story which appeared June 26,[30] the day before the bill passed in the New York Assembly.

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[30] "Bill Expected to Pass In Albany Aiding CBS," New York Times, June 26, 1985, section IV, p. 17.

The first discussion of the bill in the Wall Street Journal appeared on June 27.[31] Even though the announcement of the bill's existence did not appear in the press until just before it passed, the bill was placed on the Senate calendar on May 21, approximately five weeks before the New York Times story. The bill advanced to its third reading one week later, on May 28.[32] These events are publicly recorded, and it is possible that information concerning the bill became available to investors at these earlier times.[33]

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31 "New York May Pass Anti-Takeover Bill That Could Help CBS Fight Turner Bid," Wall Street Journal, June 27, 1985, p. 39.

32 A bill is placed on the daily calender of the State Senate or Assembly when it is reported out of committee. Usually bills are placed on the calendar in the "order of first report" (their first reading) and advance to the "order of second report" and the "order of third report" in the following session days. Floor debate begins upon a bill's third reading (order of third report). For a discussion of the New York State Legislature's procedure, see Zimmerman (1981), pp. 135-144.

33 The source for these dates is the New York State Legislative Digest: January 9, 1985-September 18, 1985. The legislative history of the Senate version (bill S5846) is on page S 500. Even though the bill was introduced in the State Assembly first, Assembly action on the bill did not begin until June 23, four days before the bill passed in the Assembly. The legislative history of the Assembly version (bill A6971) can be found on page A 602 of the Legislative Digest.

Determining an announcement date for the original bill is made more difficult since the bill may have been anticipated well before either the legislature or the press announced its existence. According to a letter written to the editor of the New York Times by Raymond T. Schuler, President of the Business Council of New York State,

> That the press did not happen to notice this important legislation doesn't mean it was kept a secret. The Business Council has been publicly calling for action on this issue for more than a year. It was a key, publicly announced topic of the "economic summit conference" we sponsored between Governor Cuomo and top business leaders last Dec. 7 and the subject of a feature article last January in our journal -- with a circulation of 16,000...[34]

If investors did anticipate the passage of the original bill many months before any published announcement of its existence, then measuring the abnormal return caused by investors' reaction to the bill may not be possible since no single, well defined event period could be

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[34] Raymond T. Schuler, "New York's Corporate-Takeover Bill is Good for Business," New York Times, July 22, 1985 (letter to the editor).

studied.[35]

Since the "announcement" of the original bill is not a clear event, we experimented with a number of alternatives, the results of which are reported in Tables 1 through 3. Table 1 provides the results from the estimation of equation (2) using three-day event windows centered on 1) June 26, the day the New York Times first reported the likely passage of the original bill (NYTIMES in the tables); 2) August 13, the day the Governor announced his veto of the first bill (VETO in the tables); and 3) October 30, the day the Governor announced his own bill (BILL2 in the tables). The estimation of equation (2) used 443 daily returns beginning 250 trading days (approximately one year) before the first bill was introduced and ending December 30, 1985.

The results reported in Table 1 indicate that the press announcement of the first statute (June 26) was

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[35] Smith, Bradley, and Jarrell (1986) discuss the difficulty of applying event analysis to the passage of legislation. Their discussion on page 488 is particularly pertinent to the problems that we encountered when trying to determine an announcement date for the first statute passed by the New York Legislature.

accompanied by a small and insignificant decline in the value of the sample firms (γ equals -0.000931, implying a CAR of 0.28%, the t-statistic is -0.68). This result could be interpreted as indicating that, on average, the bill had no effect on the value of the sample firms. However, the effect of the Governor's veto of this bill contradicts this conclusion. The veto resulted in a much larger, positive abnormal return (γ equals 0.00253 indicating a CAR of 0.76%) which is significant at a .10 probability level[36] for a two-tailed test (the t-statistic is 1.86). The much larger, positive abnormal return accompanying the Governor's veto of this bill is consistent with the hypothesis that the bill was viewed by the market as harming shareholders. Consequently, the insignificant effect of the June 26 announcement of the original bill in the New York Times indicates that this announcement did not provide new information to investors. That is, investors must have known of the bill some time before the story appeared in the New York Times; consequently, share prices would

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[36] The actual probability level for the coefficient on VETO is 0.063.

have already reflected the expected effects of the statute.

The positive abnormal return accompanying the announcement of the Governor's veto of the first takeover statute appears to indicate that the bill did not protect shareholders on average and was not in their best interest. However, the lack of any significant market reaction to the announcement of the bill in the New York Times somewhat lessens the certainty with which we can draw such a conclusion. To test if the event associated with the announcement of the first bill actually occurred during an earlier period, two additional regressions were estimated. The results of these regressions can be found in Tables 2 and 3.

Table 2 provides results from a regression in which the three-day NYTIMES window is replaced by a five-day window, ANNOUNCE1, extending from May 21 through May 28, the period in which the bill was reported out of committee in the Senate and progressed through its third reading. As indicated in Table 2, the coefficient on ANNOUNCE1 is positive, but again insignificantly

different from zero.

Table 3 reports the results from a regression in which the NYTIMES window is replaced by a 28-day window, ANNOUNCE2, extending from the day in which the bill was reported out of committee and placed on the Senate calendar, May 21, through the day the bill passed in the Legislature, June 28.[37] The coefficient on ANNOUNCE2 is negative, but also statistically insignificant. In both Tables 1 and 2, the coefficient on the three-day VETO window does not differ significantly from that reported in Table 1.

As indicated in all three tables, the Governor's announcement of the second bill resulted in a statistically significant, negative abnormal return. In Table 1, the coefficient on the three-day BILL2 window is -0.003223 indicating a CAR of -0.97%. Its t-statistic is -2.37. The coefficient for BILL2 found in Tables 2 and 3 is also not significantly different from that

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[37] As noted previously, the original bill passed in the State Assembly on June 27 and in the State Senate on June 28.

TABLES

Table 1
Abnormal Returns Over Three-day Announcement Windows

α_p	β_p	NYTIMES	VETO	BILL2
-0.000178	1.05501	-0.000931	0.002533	-0.003223
(-1.570)	(48.783)**	(-0.684)	(1.862)*	(-2.368)**

T-statistics in parentheses
*Significant at the .10 level
**Significant at the .05 level

Table 2
Abnormal Returns: ANNOUNCE1 is the Five-day Event Window From May 21 Through May 28

α_p	β_p	ANNOUNCE1	VETO	BILL2
-0.000195	1.055970	0.000898	0.002495	-0.003206
(-1.712)*	(48.808)**	(0.850)	(1.874)*	(-2.357)**

T-statistics in parentheses
*Significant at the .10 level
**Significant at the .05 level

Table 3
Abnormal Returns: ANNOUNCE2 is the Twenty-eight-day Event Window From May 21 Through June 28

α_p	β_p	ANNOUNCE2	VETO	BILL2
-0.000169	1.055110	-0.000242	0.002523	-0.00324
(-1.446)	(48.773)**	(-0.519)	(1.854)*	(-2.373)**

T-statistics in parentheses
*Significant at the .10 level
**Significant at the .05 level

The Durbin-Watson Statisitc for all three tables equals approximately 2.08.

reported in Table 1.[38] Clearly, the second bill was viewed by the market, on average, as harming shareholders. The CAR over the three-day window encompassing the announcement of the second statute indicates that the value of the firms in the sample fell, on average, by approximately 1% over this period.[39] This decline indicates a capital loss to shareholders of approximately $1.2 billion.[40]

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38 As mentioned in footnotes 11 and 12, CBS was involved in a takeover battle with Ted Turner during the period in which the first takeover statute was passed by the New York Legislature and vetoed by Governor Cuomo. In order to determine what effect this takeover contest may have had on the reported results, the regressions were rerun after dropping CBS from the sample. We found no qualitative differences between the coefficients from these regressions and those reported in the text. The VETO coefficients were slightly smaller; however, these coefficients were still significant at the 0.1 level. The coefficients on BILL2 actually increased slightly in absolute value and significance after dropping CBS from the sample.

39 The estimated coefficient for BILL2 of 0.003223 is the average abnormal return over the three day window. Three times this coefficient, 0.00967, equals the sum of the abnormal returns over the announcement window.

40 October 29 is the first day of the three-day event window encompassing the announcement of Governor Cuomo's bill. The total value of the equity of the 94 firms in the sample on October 28 was approximately $123 billion. The CAR over the three-day event window is -0.00967 indicating a loss to shareholders of $1.189 billion attributable to the Governor's announcement.

If capital markets are efficient, then the implications of the loss to shareholders has a somewhat broader interpretation. Capital market efficiency implies that security prices reflect all available information; consequently, the changes in security prices following unexpected events represent unbiased estimates of the value per share of the changes in future cash flows to the firms.[41] Thus, if the stock market is efficient, the harm to shareholders resulting from the New York statute measures, on average, the decline in the expected profitability of the sample firms attributable to the statute. Even if we reject

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[41] For relatively early discussions of capital market efficiency and the evidence supporting this hypothesis see Fama (1970, 1976). The assumption of capital market efficiency has, more recently, become somewhat controversial. Papers by Shiller (1981a, 1981b), Grossman and Shiller (1981), LeRoy and Porter (1981), and others report that stock prices are more volatile than can be justified by standard asset-pricing models. These papers conclude that the excess volatility of stock prices indicates that changes in stock prices are not related to changes in expectations of future cash flows and that prices may be irrational. However, papers by Flavin (1983) and Kleidon (1986) strongly refute these conclusions. Flavin shows that the "variance bounds" tests used in these and other papers are often severely biased toward rejection of market efficiency in small samples. Kleidon shows that price changes are consistent with changes in expectations of future cash flows when one accounts explicitly for the nonstationarity of stock prices.

capital market efficiency and, in doing so, reject the link between stock prices and expected profits, the results reported here still indicate that the takeover statute proposed by the Governor resulted in a substantial loss to the shareholders of firms governed by the statute.

VII. Conclusion

Federal and state legislators have often argued that the regulation of takeovers benefits shareholders. Past research has indicated that federal and state regulations have indeed increased the premiums which bidding firms must pay for targets. Jarrell and Bradley (1980) argue that the higher premiums paid to the shareholders of successfully acquired firms may, in fact, harm shareholders overall since they deter otherwise profitable acquisitions and, therefore, deny some shareholders the premiums which they would otherwise have received. The deterrence effect of these regulations may further harm shareholders by acting to protect inefficient managers. Moreover, the higher premiums paid to target shareholders do not represent an increase in value for the economy as a whole, only a transfer from the shareholders of bidding firms to the shareholders of target firms. Consequently, by deterring profitable, efficiency enhancing takeovers, society as a whole may be made worse off by these regulations.

This paper examines effects on shareholders of two takeover statutes passed by the New York State Legislature during 1985. Rather than measuring the effects of the statutes on firms which actually became targets, the approach of this paper is to measure their effects on a sample of firms which might all be considered potential targets. The reason for taking this approach is that it measures the net expected impact of the statutes on shareholders, accounting for both expected gains from higher premiums and expected losses from the deterrence of otherwise profitable takeovers and the entrenchment of management.

The effect of the first takeover statute is somewhat ambiguous. The announcement of this bill in the press is not accompanied by any significant change in the values of the firms in the sample. This result could indicate that the expected potential gains to successfully acquired targets just balance the expected losses from the deterrence and entrenchment effects. However, the significant positive abnormal return accompanying the Governor's veto of this bill tends to

refute this conclusion.

An alternative interpretation of the these results is that the effects of the first statute were anticipated well before the legislature and the press first announced the existence of the bill. If investors knew of the bill and expected its passage many months before its announcement in the legislature or in the press, then, by the time of these announcements, stock prices would already have reflected the bill's expected effects. In this case, we would not expect to find abnormal return on the announcement dates. The positive abnormal return accompanying the Governor's veto of the bill would, therefore, be consistent with the proposition that the provisions of the bill were counter to the best interest of shareholders.

The impact of the second takeover statute which the Governor proposed and which became law is much clearer. The announcement of this statute resulted in a highly significant decline in the average value of the sample firms. This decline of just under 1% indicates a capital loss to the shareholders of these firms of just

under $1.2 billion. Thus, despite the political rhetoric advocating the regulation of takeovers on behalf of stockholders, the evidence presented here indicates that on average this very strong statute does not protect shareholders; rather, the law protects managers at the expense of shareholders. Moreover, the decline in the average value of the firms affected by these regulations does not merely reflect a reallocation of wealth from shareholders to managers. By deterring takeovers, regulations such as the ones passed in New York may promote the inefficient management of society's assets by lessening the ability of capital markets to efficiently reallocate assets. Consequently, the real cost of the goods and services produced by the firms affected by these regulations may increase, injuring consumers as well as shareholders.

Appendix

Sample of 94 Firms Incorporated and Headquartered in New York State

1. ACME ELECTRIC CORP
2. AILEEN INC
3. AMERICAN PRECISION INDS
4. AMFESCO INDUSTRIES INC
5. ANDAL CORP
6. ANDREA RADIO CORP
7. ASTREX INC
8. AVNET INC
9. AVON PRODUCTS
10. BAIRNCO CORP
11. BASIX CORP
12. BAUSCH & LOMB INC
13. BIG V SUPERMARKETS INC
14. BOLAR PHARMACEUTICAL CO
15. BOWNE & CO INC
16. CBS INC
17. CHAMPION PRODUCTS INC
18. CHOCK FULL O NUTS CORP
19. COMPUTER FACTORY INC
20. CONCORD FABRICS INC
21. CORNING GLASS WORKS
22. CULBRO CORP
23. CURTICE-BURNS INC
24. DAMON CREATIONS
25. DESIGNATRONICS INC
26. DESIGNCRAFT INDUSTRIES
27. EAGLE CLOTHES INC
28. EDO CORP
29. ELECTROSOUND GROUP INC
30. ESPEY MFG & ELECTRONICS
31. FAY'S DRUG CO
32. FISCHBACH CORP
33. FLIGHTSAFETY INTERNATION
34. GEMCO NATIONAL INC
35. GENOVESE DRUG STORES

36. GLEASON CORP
37. GREENMAN BROTHERS INC
38. GROW GROUP INC
39. GRUMMAN CORP
40. HANDY & HARMAN
41. INTL BANKNOTE
42. INTERNATIONAL BUSINESS MACHS
43. INTL FLAVORS & FRAGRANCE
44. INTL HYDRON CORP
45. INTL PAPER CO
46. IPCO CORP
47. JOHNSTON INDS INC
48. KENWIN SHOPS INC
49. KNOGO CORP
50. LEUCADIA NATL CORP
51. LIONEL CORP
52. LORAL CORP
53. LUMEX INC
54. MACY (R.H.) & CO
55. MANHATTAN INDUSTRIES INC
56. MATERIALS RESEARCH
57. MAXXAM GROUP INC
58. MCGRAW-HILL INC
59. MELVILLE CORP
60. MESABI TRUST
61. MOBIL CORP
62. MOHASCO CORP
63. MOOG INC
64. MOVIE STAR INC
65. MOVIELAB INC
66. NEW YORK TIMES CO
67. NICHOLS (S.E.)
68. NOEL INDUSTRIES
69. ONEIDA LTD
70. PALL CORP
71. PANDICK INC
72. PARK ELECTROCHEMICAL CORP
73. PHELPS DODGE CORP
74. PICO PRODUCTS INC
75. PLY-GEM INDUSTRIES
76. POPE, EVANS & ROBBINS INC
77. PRATT & LAMBERT INC

78. RAI RESEARCH CORP
79. RUSS TOGS INC
80. S C M CORP
81. SALANT CORP
82. SANDGATE CORP
83. SANMARK-STARDUST INC
84. SERVO CORP OF AMERICA
85. SIMCO STORES INC
86. STANDARD MOTOR PRODUCTS
87. STARRETT HOUSING CORP
88. SYBRON CORP
89. THOMPSON MEDICAL CO INC
90. TODD SHIPYARDS CORP
91. TURNER CORP
92. VICON INDUSTRIES INC
93. VOPLEX CORP
94. WILLCOX & GIBBS INC

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