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Author(s): Victoria B. McWilliams

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Managerial Share Ownership and the Stock Price Effects of Antitakeover Amendment Proposals

VICTORIA B. McWILLIAMS*

ABSTRACT

Studies that test for an average stock price effect of antitakeover amendments present different results, disagreeing with respect to both the significance and the direction of the effect. This study determines whether effects can be identified when managerial share ownership and amendment type are considered. Results suggest a negative relation between managerial share ownership and the stock price reaction to all but fair price amendment proposals.

MANAGERIAL CONTROL OVER VOTING rights has been the focus of recent studies in the finance literature. For example, Dann and DeAngelo (1988) present evidence on managerial actions taken to enhance voting control, while Stulz (1988) suggests ways that managers can increase control of voting rights by adopting antitakeover amendments or dual classes of common stock that reduce the voting power of outside shareholders. Since antitakeover amendments may be one way to effectively increase managerial control over voting rights, this paper investigates the relation between managerial share ownership, the type of antitakeover amendment proposed, and the stock price reaction to the amendment proposal.

This study is motivated partially by existing evidence regarding the stock price effect of antitakeover amendments. Empirical studies are inconclusive regarding the amendments' effects on shareholder wealth, disagreeing with respect to both significance and direction. DeAngelo and Rice (1983) find statistically insignificant negative abnormal returns surrounding the amendment proposals, while Linn and McConnell (1983) find statistically significant positive abnormal returns. Jarrell and Poulsen (1987) find a statistically insignificant negative reaction to amendment proposals for exchange listed firms, while McWilliams (1988) finds an insignificant positive reaction at proposal announcement. These results are puzzling in light of the large body of evidence summarized by Jensen and Ruback (1983) and Jarrell, Brickley, and Netter (1988). Since this evidence indicates that contests for control generally increase the target firm's value, one would expect antitakeover amendments which change voting rules in a way that ostensibly helps managers thwart unfriendly takeovers to harm shareholders.

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The general finding of no significant average effect may be the result of two competing potential stock price effects of the amendments. On one hand, the amendments potentially increase managerial bargaining power for some firms in takeover bids, leading to the anticipation of a positive stock price effect. At the same time, they also appear to decrease the probability that takeover will occur for some firms, leading to a negative effect. When the stock price reaction to antitakeover amendment proposals is averaged across all firms, these competing effects may average to zero. The conclusion that average effects are not statistically different from zero, as reported by most existing studies, does not imply that antitakeover amendments have no effect on shareholder wealth of individual firms.

This study tests the hypothesis that the wealth effect of the amendments depends on managerial share ownership and the type of amendment proposed. For firms with low managerial share ownership, the amendments' positive effect resulting from the increase in managerial bargaining power should outweigh the negative effect resulting from the decrease in the probability of takeover. The opposite is expected to occur for firms with high managerial share ownership. In addition, the relation between managerial share ownership and the amendment stock price reaction should depend on the type of amendment proposed since some amendments have a stronger effect on the probability of takeover than others.

I begin my investigation by calculating the stock price effects of amendment proposals for 325 firms proposing amendments from 1980 through 1984. I then classify firms according to the percentage of managerial share ownership and the type of amendment proposed. Results indicate a benefit associated with the amendments for firms with low managerial share ownership when all but fair price amendments are proposed. As the ownership level increases, the stock price reaction to amendment proposals becomes negative.

Section I of the paper briefly describes the types of antitakeover amendments included in this study and presents details about the sample of firms and the empirical methods. Specific empirical results are presented and discussed in Section II. Section III contains a summary of test results and concluding remarks.

I. Types of Amendments, the Sample, and Empirical Methods

A. Types of Amendments

Several types of antitakeover amendments are considered in this study. The *staggered board* amendment generally divides the board of directors into three classes of equal size. The members of each class serve a three-year term, with the terms of office being staggered so that only one-third of the directors are elected annually.

The *supermajority vote* amendment generally requires from 66% to 95 percent of voting shares to approve a merger or other business combination. This amendment can include a board out clause, which allows the board of directors to override the supermajority vote requirement under certain conditions, such as

approval of the merger or business combination by a majority of directors not affiliated with the bidder.

The *fair price* amendment generally requires that each shareholder receive a price equivalent to the highest price received by a single shareholder in a takeover bid. The requirements typically become effective when a shareholder of the firm acquires a minimum of between five and twenty percent of all outstanding shares. If the fair price requirements are not met, supermajority approval as high as 90–95 percent of a merger or business combination is required. Fair price amendments can also include a board out provision.

Other amendments prevent shareholders from taking action by written consent rather than at a meeting, prevent the removal of board members without establishing cause and/or require a supermajority vote for removal, or authorize management to issue classes of common or preferred stock that may carry special voting or dividend rights.¹ *Lock-in* provisions require a supermajority vote to repeal any of the antitakeover amendments if they are adopted, and these provisions are typically proposed with antitakeover amendments.

B. The Sample

I identify firms proposing antitakeover amendments during the period 1980–1984 from three sources:

1. the New York Stock Exchange (NYSE) Security rulings unofficial list of firms listed on the NYSE that propose antitakeover amendments;
2. the Kidder, Peabody, and Co. compilation of firms listed on the NYSE, the American Stock Exchange (AMEX), and the Over the Counter (OTC) market proposing fair price amendments to their corporate charters;
3. *Antitakeover Charter Amendments A Directory of Major American Corporations* (1985) published by Investor Responsibility Research Center, Inc. (IRRC).²

The IRRC publication indicates which firms have adopted antitakeover amendments for 485 firms from the Standard & Poor's list of companies as of October 1, 1984. To determine what amendments are proposed, the firm's proxy statement announcing the proposals is examined.³

Daily returns data for each firm are obtained from the files provided by the Center for Research in Security Prices (CRSP), University of Chicago. The final sample consists of 325 firms for which returns and share ownership data are

¹ An amendment to authorize the issuance of common or preferred stock is included in this study as an antitakeover amendment if the proxy statement announcing the amendment proposal includes a statement by management to the effect that the issuance could be used by management to deter an unfriendly takeover attempt.

² I am grateful to Elizabeth Benjamin, NYSE Security rulings specialist, and Catherine Rugino of Kidder, Peabody, and Co. for making these lists available to me. Thanks also go to Hillel Gray, IRRC, for making materials available to me at a reduced fee.

³ Proxy statements are available in the Q-File, which is a file of annual reports, proxy statements, and 10-K reports for companies that have securities traded in the U.S. The Q-File is published by the Q-Data Corp.

Table I
Antitakeover Amendment Proposals

The table presents a breakdown, according to type and year proposed, of 763 antitakeover amendments proposed by 325 NYSE and AMEX firms from 1980 through 1984. Ninety-seven percent of the proposed amendments include lock-in provisions.

Type (1)	1980 (2)	1981 (3)	1982 (4)	1983 (5)	1984 (6)	Total (7)	Percent of total (8)
Fair price	3	1	8	103	116	231	30
Supermajority vote	8	3	3	6	9	29	4
Staggered board	8	5	10	66	69	158	20
Authorized issuance of common/ preferred stock that may have special voting/dividend rights	1	3	3	41	63	111	15
Directors removed for cause only and/or with supermajority vote	3	3	5	57	58	126	17
Shareholders can act at meetings only	5	1	2	46	54	108	14
Total	28	16	31	319	369	763	100

available. Of the 325 firms, fifteen proposed antitakeover amendments during 1980, seven during 1981, twelve during 1982, 132 during 1983, and 159 during 1984.

Table I reports the types and number of amendments proposed during the sample period. A total of 763 antitakeover amendments are proposed by the 325 sample firms from 1980 through 1984. Most of the amendments are proposed in 1983 and 1984 (688 of 763). The most frequently proposed amendment is the fair price amendment, representing thirty percent of the amendments. The second most popular proposed amendment is the staggered board amendment, which represents twenty percent of the amendments. Supermajority vote amendments are the least frequently proposed. Ninety-seven percent of the amendments include lock-in provisions that require a supermajority vote to repeal the amendments if they are adopted.

The sample is also partitioned according to the percent of shares owned by insiders, defined as the firm's officers and directors. Insiders' share ownership is taken from the proxy statement announcing the proposal of the antitakeover amendments and is measured as the percent of the firm's shares owned by insiders and immediate family members. Also included are shares beneficially owned by one or more insider and options owned by insiders that are reported as exercisable within sixty days.⁴

Table II presents the distribution of insider ownership stake. For most of the sample firms (60 percent), insiders own 10 percent or less of the firm's shares. The minimum percent of shares owned by insiders is 0.04, while the maximum percent owned is 65.11. Mean and median values for the full sample are 11.38 percent and 6.43 percent. These figures are lower than the mean and median

⁴ Since insider share ownership attempts to measure managers' control of voting rights, it includes all shares with voting rights (e.g., voting preferred).

Table II
Distribution of Insider Share Ownership

The table presents the distribution of percent of shares owned by insiders (officers and directors) for the 325 sample firms proposing antitakeover charter amendments from 1980 through 1984. Percent of shares owned is taken from the proxy statement announcing the amendment proposal and includes options that are reported as exercisable within sixty days. The minimum and maximum insider share ownership values are 0.04% and 65.11%, respectively.

Percentage (1)	Number of firms (2)	Mean (Median) (%) (3)	Percent of total (4)
≤10	194	3.37 (2.82)	60
>10 and ≤20	64	14.28 (13.88)	20
>20 and ≤30	36	24.75 (25.08)	11
>30 and ≤40	20	34.72 (35.11)	6
>40	11	49.40 (45.01)	3
Total sample	325	11.38 (6.43)	100

insider shareholdings obtained from the *Value Line Investment Survey* calculated over 55 different *Value Line* industries, as reported by Malatesta and Walkling (1988), of 23.12 percent and 21.01 percent. The figures reported in Malatesta and Walkling are also based on summary information taken from the firm's proxy statement.

In order to measure the stock price effect of antitakeover amendment proposals, it is necessary to identify the date of the first public announcement of the proposal. For all but three firms, the announcement date is the proxy mailing date.⁵ The remaining three firms have *Wall Street Journal* announcements that predate the proxy mailing date. Therefore, the announcement date for these firms is defined as *The Wall Street Journal* announcement date. In total, approximately fifty percent (164) of the sample has announcements of the proposal published in *The Wall Street Journal*. In addition to the three announcements that predate the proxy mailing, 119 of the announcements report the annual meeting at which shareholders voted on the amendments. One hundred fourteen of these firms report passage of the antitakeover amendments. Forty-two announcements occur between the proxy mailing and the shareholder meeting.

⁵ Linn and McConnell (1983) and DeAngelo and Rice (1983) use the proxy mailing as the announcement date since they are also unable to find a published report of the amendment proposals that predates the proxy mailing. Jarrell and Poulsen (1987) use the proxy signing as the announcement date. Jarrell and Poulsen state that the proxy mailing date is the same day as or one day after the proxy signing date. For the 214 firms in this study that overlap the Jarrell and Poulsen sample, announcement dates match except in seven cases.

In some cases other proposals are included in the proxy statements. In addition, 166 firms have a *Wall Street Journal* announcement on the day of proposal announcement of an event other than the antitakeover amendment proposals. These additional proposals and announcements may confound the measurement and interpretation of the amendment proposal effect on shareholder wealth. To determine whether the confounding events are a potential problem, the event studies for the full sample that are described below are run for the 166 firms with confounding events and for the 159 firms with no confounding events. Results are not statistically different for these two groups. Therefore, the firms with confounding events are not dropped from the sample.

C. Measurement of Stock Price Effects

Daily excess returns are calculated around selected dates. The primary date of interest is the announcement date, as any stock price reaction should be observed at this time if markets are semi-strong form efficient. For completeness, excess returns are also measured during the forty-day pre-announcement interval and during the interval from announcement through outcome of the proposal.

Standard event-study methodology is used to measure excess returns when antitakeover amendments are proposed.⁶ Market model parameter estimates are calculated, whenever possible, over the 200 trading days beginning 315 trading days before the event day on which antitakeover amendments are proposed.⁷ The daily common stock returns and market returns are obtained from the CRSP files.

Two types of statistical tests for significant stock price reactions are conducted. A *t*-test is used to test whether the mean prediction errors are different from zero. Since the *t*-statistic can be sensitive to extreme values, tests of statistical significance are also performed using a nonparametric sign test. This is used to test whether the proportion *p* of positive prediction errors is different from 0.50.

II. Results

Table III presents results for the full sample, for firms with and without prior antitakeover amendments, and for categories of firms defined according to percent of insider share ownership.⁸ Any subset having fewer than ten firms was considered too small to provide credible inferences and was not included in the analysis. Results for the ownership subsets are used to test for a different stock price effect between groups of firms with different levels of insider share ownership.

⁶ See Brown and Warner (1985).

⁷ Four sample firms do not have CRSP daily returns data available at the beginning of the 200-day estimation period but do have data during at least 100 trading days which are used to estimate market model parameters. Three firms do not have sufficient CRSP data prior to the event date for market model estimation. For these firms, market model parameters are estimated during the 200 trading days beginning 136 days after the event date.

⁸ Firms adopting prior amendments are identified using data from DeAngelo and Rice (1983), Jarrell and Poulsen (1987), and information provided by IRRCo.

Table III

Stock Price Reaction to Antitakeover Amendment Proposals

Average prediction errors as a percent are presented for 325 firms that proposed antitakeover amendments from 1980 through 1984, with *t*-statistics and number of positive prediction errors reported in parentheses. Subsets are based on proportions of insider share ownership. All intervals are measured relative to the announcement of the amendments. For all but three firms, the announcement period is defined to be the proxy statement date and the following trading day. For the remaining three firms, the first public announcement is a published report in *The Wall Street Journal*. For these firms the announcement period is defined to be the day of the report and the previous trading day. The pre-announcement period is the interval from 40 days before the announcement day through the day before the amendment proposal announcement (i.e., -40, -1).

Subset (1)	Interval		Cumulative prediction error from the announcement day through the shareholder meeting or a published report of the meeting (4)
	Pre-announcement period cumulative prediction error (2)	Announcement period prediction error (3)	
Panel A: General Results			
All firms (<i>n</i> = 325)	-0.63 (-0.94; 156)	0.21 (1.61; 163)	1.77 (2.45*; 186**)
Firms with prior amendments (<i>n</i> = 39)	-2.74 (-0.71; 17)	0.16 (0.60; 23)	0.49 (0.41; 20)
Firms with no prior amendments (<i>n</i> = 286)	-0.42 (-0.80; 139)	0.22 (1.51; 138)	1.65 (2.33*; 165**)
Panel B: Insider Share Ownership			
≤10% (<i>n</i> = 194)	-1.67 (-1.65; 86)	0.49 (2.32*; 108)	1.94 (1.93; 110)
>10 and ≤20% (<i>n</i> = 64)	-0.06 (-0.20; 30)	-0.08 (-0.12; 30)	1.99 (1.34; 37)
>20 and ≤30% (<i>n</i> = 36)	2.78 (0.75; 23)	-0.30 (-0.12; 14)	1.71 (0.77; 21)
>30 and ≤40% (<i>n</i> = 20)	4.38 (1.26; 13)	-0.06 (-0.00; 8)	2.55 (1.11; 14)
>40% (<i>n</i> = 11)	-6.77 (-0.82; 4)	-0.91 (-0.51; 3)	-3.58 (-0.91; 4)

* Significant at the 0.05 level.

** The proportion of positive prediction errors is significantly different from 0.50 at the 0.01 level.

For the full sample, the average interval prediction error for the announcement period is insignificant. The average prediction error during the interval from the proposal announcement through the shareholder meeting date or the date of a published report of the meeting outcome is +1.77 percent, significant at the 0.05 level based on the *t*-statistic and at the 0.01 level based on the sign test statistic. While there is no statistically significant stock price reaction at proposal announcement, the positive average interval prediction errors at announcement and from announcement through outcome suggest that antitakeover

amendments, on average, do not harm shareholders. The significant reaction during the interval from announcement through outcome, the period during which uncertainty regarding approval of the amendments is resolved, suggests that there is a positive effect associated with amendment proposals. However, it is difficult to explain the timing of this positive reaction since these amendments are typically approved by shareholders, so the uncertainty regarding amendment approval is slight.⁹

The conclusion that antitakeover amendments on average do not harm shareholders differs from that of DeAngelo and Rice (1983), who conclude that there is weak evidence that the amendments harm shareholders, but is consistent with that of Linn and McConnell (1983). More recently, Jarrell and Poulsen (1987) conclude that, on average, antitakeover amendments harm shareholders. However, the discrepancy in conclusions between this study and the Jarrell and Poulsen study may be due to the fact that approximately one third of the Jarrell and Poulsen sample consists of Over the Counter firms. When Jarrell and Poulsen separate their sample into exchange listed firms and non-exchange firms, the results for the exchange listed firms are still negative but are no longer significant. Also, there is no statistically significant difference in results for the exchange and non-exchange firms.

The second and third rows of Panel A of Table III present results for firms separated according to whether the firm has adopted an antitakeover amendment prior to the current proposal. Since the probability of proposing an amendment may differ for these two groups, the stock price reaction may differ as well. No average interval prediction error is significant for the group with prior amendments. The sign, size, and significance of the average interval prediction errors for firms with no prior amendment are similar to those for the full sample. In addition, announcement period results are not statistically different for firms with and without prior amendments. Therefore, all remaining subset classifications are based on the full sample.

Panel B of Table III presents results for groups defined according to percent of insider share ownership.¹⁰ The only significant average interval prediction error occurs for firms whose insiders own ten percent or less of the firm's shares. During the two-day announcement period interval, the average prediction error for this group is +0.49 percent, significant at the 0.05 level based on the *t*-statistic. This is also the only positive average prediction error during the announcement period interval for insider share ownership subsets.

Table III results suggest that the amendments have a positive effect on shareholder wealth when proposed by firms having low insider share ownership (ten percent or less). This positive effect may be due to the increase in bargaining

⁹ A survey conducted by IRRG (1984) indicates that 96 percent of antitakeover amendment proposals included in the survey that were made during the 1984 proxy season were passed. Linn and McConnell (1983) find that 98 percent of amendments proposed by their sample firms passed.

¹⁰ Announcement period average interval prediction errors are calculated for subsets with insider share ownership of two percent or less, five percent or less, and seven percent or less to determine whether a different picture emerges than for the ten percent or less group. Results are similar in sign and significance to those reported for the ten percent or less group; therefore, the subsets begin with the ten percent or less group and increase in increments of ten.

power brought about by the amendments. As insiders control higher percentages of the firm's shares, the perceived reduction in the probability of successful takeover outweighs the increase in bargaining power, leading to a negative stock price reaction.¹¹

Tests were also performed to compare the average interval prediction error at announcement for the ten percent or less subset with the average interval prediction errors at announcement for all other subsets.¹² The results are consistent with the conclusion that the amendments result in a positive effect for the low insider share ownership group. The stock price reaction is significantly larger ($t = 2.93$) at announcement for firms whose insiders own ten percent or less of the firm's shares than for firms whose insiders hold between ten and twenty percent of the firm's shares. Tests for differences in stock price reactions at announcement for all other groups in Table III fail to reject the null hypothesis of no difference.

To this point managerial share ownership reflects shares owned by all officers and directors as a group. This implicitly assumes that the group of insiders agrees about the amendment's appropriateness, which may not be the case. Therefore, two alternative measures of managerial share ownership are also considered: the percent of shares owned by the chief executive officer (CEO) and the percent of shares owned by the board of directors.¹³ The pattern of stock price reactions to antitakeover amendment proposals is consistent regardless of which measure is used, and the results are not presented for the sake of brevity. Once again, amendment proposals appear to have a positive effect for low ownership groups, while there appears to be a negative effect associated with the proposals for high ownership groups.

It is possible that this conclusion is based on a spurious relation. Ranking firms by percent of managerial share ownership may be similar to ranking firms by size, and firm size is a proxy for risk. Observing an inverse relation between managerial share ownership and the stock price reaction to amendment proposals may simply be the result of a positive relation between expected returns and risk. To determine whether managerial share ownership or firm size is responsible for the results described so far, I recalculate average interval prediction errors after controlling for size.¹⁴ Results suggest that firm size is not responsible for the observed relation between managerial share ownership and amendment proposal announcement effects.¹⁵

Another issue that may affect the stock price reaction to proposal announcement is the type of amendment proposed. Some amendments may change existing voting rules to reduce the voting power of outside shareholders more effectively

¹¹ This explanation is consistent with Stulz (1988).

¹² Tests for differences in average interval prediction errors are based on t -statistics with nonpooled variance estimates. This decision was based on the results of statistical tests for differences in variances.

¹³ If the firm's proxy statement announcing the amendment proposal does not list a chief executive officer, then the next highest ranking officer is identified (e.g., President and Chief Operating Officer).

¹⁴ Firms are separated according to market value of equity and total assets.

¹⁵ This is consistent with Demsetz and Lehn (1985), who conclude that firm size is negatively related to ownership concentration.

than others. Supermajority vote amendments and fair price amendments, which typically have a supermajority vote provision, change the percentage of votes required to approve a merger or other business combination. Staggered board amendments change voting rules for electing directors. I therefore examine the stock price reaction for firms whose managers own different percentages of the firm's shares and propose different types of amendments. This is done by using regression analysis to determine whether significant relations exist between the two-day announcement period stock price reaction, managerial share ownership, and amendment type.¹⁶

Amendments are identified as fair price, staggered board, supermajority vote, or non-fair price amendments. I also include a category referred to as "Other" that represents amendments that prevent shareholders from taking action by written consent rather than at a meeting, prevent the removal of board members without establishing cause and/or require a supermajority vote for removal, or authorize management to issue classes of common or preferred stock that may carry special voting or dividends rights. The non-fair price amendment subset is included in order to make comparisons between the fair price subset and the categories which include all other types of antitakeover amendments, since fair price amendments are suggested to be the least restrictive and therefore the least harmful or most beneficial type of amendment.¹⁷ In all cases *except* the fair price subset, firms generally proposed other types of amendments in addition to the subset amendment. Therefore, in order to make comparisons based on managerial share ownership and amendment type, it was necessary to use a classification scheme that includes firms proposing more than one type of antitakeover amendment.¹⁸

I begin by using a simple regression model to address whether a relation exists between the announcement period stock price reaction and the various measures of managerial share ownership for the full sample. The results are as follows (*p*-values in parentheses):

$$Y = (0.522 - 0.0323(\text{Insider Share Ownership } \%), \quad R^2 = 2.0\%, \\ (0.01) \quad (0.01)$$

$$Y = 0.380 - 0.0686(\text{CEO } \%), \quad R^2 = 2.2\%, \\ (0.03) \quad (0.01)$$

$$Y = 0.500 - 0.0356(\text{Board } \%), \quad R^2 = 2.1\%. \\ (0.01) \quad (0.01)$$

¹⁶ One of the original 325 firms considered in this study, Amrep Corporation, is not used in the regression analyses because its average interval prediction error is extreme relative to the other sample values. (The average prediction error is 6.28 standard deviations above the mean of an otherwise well behaved, normal-shaped distribution.)

¹⁷ See Jarrell and Poulsen (1987).

¹⁸ Only four of 68 fair price amendments and two of 29 supermajority vote amendments do not contain board out provisions. In addition, only 23 of 763 amendments do not contain lock-in provisions. Due to the small number of amendments that do not contain these clauses, I make no distinction between firms with and without these provisions.

All constants and coefficient estimates are significant at least at the 0.05 level.¹⁹ Results indicate that the stock price reaction to amendment proposals is positive when managerial share ownership is near zero, but it decreases as managerial share ownership increases. These results suggest that the amendments are viewed as decreasing the probability of successful takeover when proposed by firms having higher levels of managerial share ownership, which is consistent with Stulz (1988).

The second analysis uses a multiple regression model to relate the announcement period stock price reaction to insider share ownership and a series of indicator variables denoting the type of amendment(s) proposed.²⁰ Coefficient estimates for the managerial share ownership variables are still negative and significant at the 0.01 level, while the coefficient estimates of the indicator variables are all insignificant. This suggests that there is no difference in mean responses for the different amendment types. All else constant, the type of amendment does not affect the stock price reaction to antitakeover amendment proposals when managerial share ownership is taken into consideration.

To determine whether the strength and direction of the negative relation between the proposal announcement effect and managerial share ownership variables are similar for different types of amendments, I classify firms according to amendment type and regress the announcement period stock price reaction against the managerial share ownership variables. Results for the insider share ownership variable are presented below.²¹

Fair Price:

$$Y = -0.052 - 0.0208(\text{Insider Share Ownership } \%), \quad R^2 = 0.8\%, \\ (0.91) \quad (0.46)$$

Non-Fair Price:

$$Y = 0.694 - 0.0368(\text{Insider Share Ownership } \%), \quad R^2 = 3.1\%, \\ (0.07) \quad (0.09)$$

Staggered Board:

$$Y = 0.685 - 0.0444(\text{Insider Share Ownership } \%), \quad R^2 = 4.3\%, \\ (0.01) \quad (0.01)$$

Supermajority Vote:

$$Y = 1.189 - 0.0690(\text{Insider Share Ownership } \%), \quad R^2 = 11.9\%, \\ (0.15) \quad (0.07)$$

Other:

$$Y = 0.612 - 0.0302(\text{Insider Share Ownership } \%), \quad R^2 = 1.8\%. \\ (0.02) \quad (0.04)$$

¹⁹ I measure firm size by market value of equity or by total assets. When I control for size by incorporating either measure as an independent variable in the regression models, the coefficient estimates for that variable are never significantly different from zero.

²⁰ I once again control for firm size as well as for firms having prior amendment adoptions. Coefficient estimates for those variables are never significantly different from zero.

²¹ Results for CEO and board share ownership variables are quite similar.

The relation between the amendment proposal effect and managerial share ownership is negative regardless of the type of amendment proposed and is significant (at least at the 0.10 level) for all amendment types except the fair price amendment. The observed combinations (for all but fair price amendments) of a positive intercept and a negative slope suggest that the stock price reaction but changes sign as managerial share ownership increases. This change occurs at share ownership levels between approximately 15 and 20 percent, depending on the type of amendment considered. These results suggest that, with the exception of fair price amendments, antitakeover amendments are beneficial for low managerial share ownership firms but lead to increasingly negative stock price reactions for high ownership firms.

Although we observe a significant relation between the stock price reaction and managerial share ownership, it should be noted that explanatory power of the independent variable, as measured by R^2 , is low. Most of the variability in the price effect at the time the amendments are proposed either is due to random fluctuations or is related to variables not identified in this study.

The conclusion that the stock price effect of antitakeover amendment proposals is related to managerial share ownership is interesting in light of results presented by Jarrell and Poulsen (1987). They also use regression analysis to determine whether a significant relation exists between the stock price reaction to antitakeover amendment proposals and managerial share ownership. Their managerial share ownership coefficient estimate is insignificant, leading them to conclude that managerial shareholdings are not related to the amendment announcement effect. Differences between the Jarrell and Poulsen study and this study may explain this inconsistency in conclusions. Jarrell and Poulsen indicate that 75 percent of their sample represents fair price amendment proposals, while only 30 percent of the proposals in this study are fair price amendments. Also, Jarrell and Poulsen use a 31-day (-20, +10) average interval prediction error as the dependent variable in their regression model rather than a two-day prediction error.

III. Summary and Conclusions

This study examines the stock price reaction to the proposal of 763 antitakeover amendments by 325 firms listed on the New York or American Stock Exchanges. The amendment proposals occurred from 1980 through 1984.

The hypothesis of interest in this study is that there is a different stock price reaction to amendment proposals depending on the percent of the firm's shares owned by the firm's officers and directors and the type of amendment proposed. This hypothesis is examined in two ways. First, stock price reactions to amendment proposals are measured and compared for firms having different levels of managerial share ownership. Second, regression analysis is used to determine whether a relation exists between the stock price reaction to antitakeover amendment proposals, managerial share ownership, and amendment type.

Tests for differences in average responses for firms classified according to managerial share ownership lead to rejection of the hypothesis of no difference

in several cases. A significant positive effect at announcement is observed for firms having low levels of managerial share ownership (ten percent or less), which is significantly larger than negative effects observed at higher levels of share ownership. In addition, regression analysis suggests that all amendments, except fair price amendments, appear to be beneficial for firms whose managers have low share ownership and lead to increasingly negative announcement effects for high managerial share ownership firms.

The knowledge that the stock price reaction to antitakeover amendment proposals differs depending on the level of managerial share ownership and the type of amendment proposed may help to explain some puzzling issues regarding evidence about the market for corporate control. Contests for control generally increase the target firm's value, but antitakeover amendments which change voting rules in a way that potentially helps managers thwart unfriendly takeovers do not appear to harm shareholders. The general finding of no average stock price effect may simply be the result of the amendments' competing effects: the increased bargaining power in the event of a takeover bid and the decreased probability that a takeover will occur. When averaging the stock price reaction across all firms, these components may average to zero so that a significant stock price reaction is not observed.

Incorporating managerial share ownership and amendment type in the analysis of stock price reactions to antitakeover amendments helps to isolate the two theoretical effects of the amendments. The results of this study point to a possible benefit associated with the amendments for the low ownership group along with the corresponding possibility of harmful (or at least less beneficial) effects for the high ownership group, suggesting that the market does not view the amendments as neutral. These findings help to explain why we do not observe a significant stock price reaction on average when antitakeover amendments are proposed. It does appear that, when managerial share ownership and amendment type are considered, antitakeover amendments have a differential effect on shareholder wealth as measured by the stock price reaction to amendment proposal.

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