

Large Shareholders and the Monitoring of Managers: The Case of Antitakeover Charter Amendments

Anup Agrawal and Gershon N. Mandelker*

Abstract

This paper examines the role of large shareholders in monitoring managers when they propose antitakeover charter amendments. We attempt to distinguish between two competing hypotheses: the "active monitoring hypothesis" and the "passive voting hypothesis." We find a statistically significant positive relation between institutional ownership and the stockholder wealth effects of various types of amendments, after controlling for ownership concentration among institutions, managerial ownership, and firm size. Our empirical evidence lends support to the "active monitoring hypothesis" proposed by Demsetz (1983) and Shleifer and Vishny (1986) that the existence of large shareholders leads to better monitoring of managers.

I. Introduction

Over the last four decades, there has been a significant growth in the shareholdings of institutions. The SEC (1973) reports that their holdings of total outstanding corporate stock increased from a mere 5 percent in 1945 to 24 percent in 1965. Jensen (1989) indicates that their holdings currently exceed 40 percent. The dramatic increase in the ownership of these large investors has raised interest in their role in monitoring managers. Demsetz (1983) and Shleifer and Vishny (1986) argue that owners of large blocks of shares have greater incentives to monitor managers. Jarrell and Poulsen (1987), in a similar vein, argue that sophisticated, well-informed shareholders such as institutions are likely to vote more consistently in accordance with their economic interests than less informed shareholders. We refer to this as the "active monitoring hypothesis." On the other hand, it is often claimed that many large investors are passive voters (for a discussion, see Pound (1988)). They either always vote with management, fol-

* Division of Economics and Business, North Carolina State University, Raleigh, NC 27695-8110, and Katz Graduate School of Business, University of Pittsburgh, Pittsburgh, PA 15260, respectively. A part of this research was conducted while the first author was at Baruch College, City University of New York. The authors are grateful to seminar participants at Baruch College, Boston College, Emory University, North Carolina State University, and the 1988 FMA meetings for helpful comments. In addition, they would like to thank R. Ariel, G. Benston, J. Brickley, H. Eytan, C. Hessel, C. Knoeber, W. Marr, A. Shleifer, R. Stulz, H. Tehranian, S. Thomadakis, N. Travlos, and especially Dennis Sheehan, a *JFQA* referee, for useful suggestions. H. C. Jung provided valuable research assistance. The first author acknowledges financial support from the PSC-CUNY Research Award Program.

low the "street rule" of abstaining from voting, or sell their shares to avoid voting. This is henceforth referred to as the "passive voting hypothesis."

Monitoring of managers takes on special importance when antitakeover charter amendments (atcas) are proposed. Atcas provide a rare opportunity to assess the monitoring role of large shareholders, because they are subject to shareholders' approval. These amendments, also known as "shark repellents," are frequently used to block hostile takeovers. There are five commonly observed types of atcas. The first, a "supermajority voting" provision, increases the majority shareholder vote needed to approve a merger to between 66 and 95 percent, thus giving a veto power to a minority of shareholders to block a merger. The second, a "supermajority with board-out" clause, requires a supermajority to approve a merger, but allows the board of directors to waive this requirement. The third, a "fair price" provision, requires a bidder to offer a "fair price," defined either as the highest price paid by the bidder for any target shares it has acquired, or as a price approved by the target board. Failure by the bidder to meet this requirement triggers a supermajority voting provision. A fourth type of atca is a "classified board" provision, which staggers the terms of service of the directors so that only a minority (such as a third) can be voted out of office in a given year. A fifth type of atca is an "authorization to issue preferred stock," which enables the directors to set the terms of special preferred stock (i.e., a "poison pill") they can issue to defend against hostile takeover attempts.

In both the academic finance literature and in public policy debates, atca proposals have generated considerable controversy. Linn and McConnell (1983) take the position that the adoption of these amendments enables the management of a firm faced with a hostile takeover bid to negotiate a "better deal" for their shareholders. They interpret their empirical findings as supporting this "shareholder welfare hypothesis." On the other hand, DeAngelo and Rice (1983) argue that atcas can be used by managers to make their jobs more secure by reducing their exposure to hostile takeover attempts. They interpret their empirical findings as providing support for this "managerial entrenchment hypothesis." In addition, an atca proposal can signal an impending acquisition attempt as well as greater managerial resistance to a hostile bid. Keown, MacDonald, and Pinkerton (1986) and Pound (1987) present mixed evidence of these signalling effects. In view of these opposite effects, the finding of insignificant average changes in stock prices around the announcements of atca proposals is difficult to interpret and suggests that atca proposals may be driven by diverse motives.

The small magnitude of the average wealth effect leads Gilson (1986) to suggest that atcas may not be effective takeover barriers. Malatesta and Walkling (1988) argue that the small wealth effects of atcas may be due to the fact that shareholders, after all, approve them.¹ This argument is consistent with the evidence that takeover defenses that are not subject to shareholders' approval result in large decreases in shareholders' wealth (see, e.g., Bradley and Wakeman (1983), Dann and DeAngelo (1983), (1988), Malatesta and Walkling (1988), and Ryngeart (1988)).

¹ These proposals rarely fail to receive stockholders' approval. The Investor Responsibility Research Center (IRRC) reports that in 1984, over 95 percent of the atca proposals of managers were approved by stockholders.

This study provides some evidence that pertains to recent controversies surrounding the effects of antitakeover charter amendments (atcas) on shareholders' wealth and the role of institutional ownership in monitoring managers. First, we attempt to distinguish between two competing hypotheses about the monitoring role of large shareholders: the "active monitoring hypothesis" and the "passive voting hypothesis." Second, we examine the relation between the wealth effects of atca proposals and the equity ownership of managers.

We find that the shareholder wealth effects of atca proposals are positively related to the proportion of equity owned by institutions. This finding holds for various types of amendments after controlling for the concentration of institutional ownership, managerial ownership, and firm size. The evidence supports the active monitoring hypothesis. The findings on 5-percent blockholders also are consistent with this hypothesis. Consistent with Jarrell and Poulsen (1987), we do not find a significant relation between abnormal returns and the percentage of managerial ownership.

The paper is organized as follows: Section II discusses issues and hypotheses; Section III reviews the previous literature; Section IV describes the data and methodology; Section V presents the tests of the hypotheses and discusses their implications; and Section VI concludes the paper.

II. Issues and Hypotheses

Antitakeover amendments potentially have two opposite effects on the wealth of stockholders. First, by raising the barriers against takeovers, they increase the required premium for a successful acquisition and thus increase the potential gain to stockholders. Second, they reduce the likelihood of bids for the firm and thus have a negative effect on stockholders' wealth. The empirical evidence on the effect of atcas on stockholders' wealth is ambiguous. Linn and McConnell (1983) and DeAngelo and Rice (1983) reach opposite conclusions and call for further tests of the competing hypotheses.

The available evidence also is consistent with the conjecture that firms proposing atcas can be seen as belonging to two groups: one, whose proposals are driven by stockholder welfare motives; and another, whose proposals are driven by managerial entrenchment motives. The atca proposals of the first group may have a positive effect on stockholders' wealth, while those of the second group may have a negative effect. When one lumps the two groups together, the *average* effect becomes insignificant. But this does not imply that these proposals have unimportant effects on shareholders' wealth.

When managers of a firm propose an atca, investors analyze its probable effects and their evaluation is reflected in the adjustment of stock prices. Large investors have more at stake in the firm and, therefore, have more to lose or gain if an atca is adopted. Hence, their optimal monitoring expenses and, therefore, the probability of uncovering the intended use of the atca, will be greater.² Obviously, the larger the fraction of equity owned by large investors, θ , the more influential will be their vote. Consequently, rational managers are less likely to

² Casual evidence of monitoring by institutions and other large shareholders abounds. In a cover story, *Business Week* (May 18, 1987) highlights several recent instances of such monitoring.

propose an atca harmful to stockholders when θ is larger.³ Thus, the active monitoring hypothesis implies that the stockholder wealth effects of atca proposals will be more favorable the larger the θ .⁴ On the other hand, the passive voting hypothesis implies no relation between these variables. This is the first issue we examine.

Second, we examine the incentives of managers to propose these amendments. A hostile takeover of the firm is often associated with the replacement of the top management team. If managers lose their jobs, they not only lose their firm-specific human capital, but also are likely to suffer a downward revaluation of their general human capital. The larger the fraction of equity owned by managers (α), the greater is their influence on the outcome of an atca proposal as well as on the outcome of any hostile bid for the firm. Brickley, Lease, and Smith (1988) argue that the larger the α , the more likely are managers to propose amendments that protect their jobs but reduce shareholders' wealth. Human capital, however, is not the only component of managers' wealth that is affected by such an atca. Given the substantial premiums that target stockholders receive in takeover bids, the larger the stock ownership of managers, the greater is the increase in this component of their wealth in a successful bid. Thus, managers face a personal wealth trade-off. Managers' optimal choice of the atca type depends upon the relative magnitudes of the opposing effects on the human capital and the equity ownership components of their total wealth. Since both effects are likely to vary cross-sectionally, the relation between managers' α and changes in stockholders' wealth is an empirical issue.

III. Previous Literature

The available empirical evidence on the monitoring role of institutions is mixed. Brickley, Lease, and Smith (1988) find that when firms propose atcas that have a negative effect on shareholders' wealth, there is a positive relation between the percentage ownership of institutions and the proportion of shareholders voting against these proposals. Jarrell and Poulsen (1987) report that firms proposing the more harmful types of amendments (i.e., non-fair-price) have lower institutional holdings. These findings are consistent with the "active monitoring hypothesis." Pound (1988) finds that the probability of the dissident winning a proxy contest is negatively related to the proportional ownership of institutions, which is consistent with the "passive voting hypothesis."

Both Brickley, Lease, and Smith (1988) and Jarrell and Poulsen (1987) look, in passing, at the relation between institutional ownership and the shareholder wealth effects of atcas. Brickley, Lease, and Smith focus on explaining the patterns of shareholder voting on these proposals, while we concentrate on explaining their wealth effects. They mention that institutional ownership is lower in firms that experience negative abnormal returns around atca proposals,

³ IRRC reports that some companies employ proxy solicitation firms to assess the voting outcome of a proposed amendment before proposing it to shareholders.

⁴ One can argue that investors can anticipate the actions of managers when θ is observable; however, their actions may not be perfectly anticipated because, as we discuss next, managers face a trade-off in proposing an atca. To the extent that investors can correctly infer managerial motives by observing θ , the odds of finding a positive relation are lower.

but they do not control for managerial ownership, firm size, and the type of amendment. Since these variables can have important effects, we control for them when examining the wealth effects.

Jarrell and Poulsen focus on an analysis of the different types of atca proposals. They find no relation between the abnormal returns around atca announcements and institutional ownership (see their Table 7). About two-thirds of their sample consists of exchange-listed firms, the remainder being over-the-counter (OTC) firms. They report (in Table 8) that while both groups have similar abnormal returns, institutional ownership is much smaller in the OTC firms. It is possible, then, that lumping these groups together obscures the relation between abnormal returns and institutional ownership. They also do not control for firm size.

Neither Brickley, Lease, and Smith nor Jarrell and Poulsen examine the issues of *concentration* of ownership by institutions, the influence of the dollar value of their holdings, and the role of 5-percent blockholders in monitoring managers. This study provides an examination of these issues.

IV. Data and Methodology

The sample of NYSE and AMEX firms proposing antitakeover amendments, the data of the proxy statement containing the proposal, and the date on the aggregate ownership by all institutions⁵ and by all directors and officers in each firm were obtained from Jarrell and Poulsen (1987). This represents a near-exhaustive list of 372 NYSE and AMEX firms proposing these amendments during 1979 to 1985. The list of firms was originally compiled by the investment banking firms of Drexel Burnham Lambert and Kidder Peabody and by the SEC's Office of Tender Offers. Data on aggregate institutional stockholdings were obtained from *Spectrum 3: 13(F) Institutional Stock Holdings Survey*. The stock ownership of directors and officers was compiled from proxy statements. In addition, we collected data on the percentage ownership by each of the five largest institutional owners of 302 sample firms from various quarterly issues of *Spectrum 3*.

We also obtained data on the percentage ownership of each of the two largest owners of 5 percent or more of the firm's outstanding equity (called "5-percent owners" by the SEC), and the aggregate percentage owned by all such owners, from various quarterly issues of *Spectrum 5: Five Percent Ownership*. For each 5-percent owner, we obtained the percentage over which the owner has sole voting power, the percentage over which voting power is shared with other owner(s), and the percentage of total ownership over which the investor has voting or investment powers (either sole or shared). Out of the group of 5-percent blockholders, we eliminated owners who were directors or officers of the firm in the given year according to *Moody's Manuals*.⁶ We were able to obtain these data for 232 firms.

⁵ These include pension funds, bank and trust companies, endowments, mutual funds, and investment counsel firms.

⁶ We also attempted to eliminate the ownership by their family members or by businesses controlled by them. Neither *Spectrum* nor *Moody's* provide this information. Therefore, we eliminated

Table 1 shows a profile of the sample of firms proposing atcas. Panel A shows that 14 percent of the sample firms proposed atcas during 1979–1982, while 86 percent proposed them during 1983–1985. This reflects the tremendous growth in the adoption of antitakeover defenses in recent years.

TABLE 1
A Profile of the Sample of Firms Proposing Antitakeover Amendments

<i>Panel A^a</i>				
<u>Year of Proposal</u>	<u>% of Sample</u>			
1979	2			
1980	5			
1981	3			
1982	4			
1983	35			
1984	30			
1985	21			
<i>Panel B^a</i>				
<u>Type of Amendment</u>	<u>% of Sample</u>			
Fair Price	75			
Classified Board	5			
Authorized Preferred	5			
Supermajority	8			
Supermajority with Board Out	7			
<i>Panel C</i>				
<u>% of Outstanding Equity Owned by</u>	<u>Mean</u>	<u>Median</u>	<u>Standard Deviation</u>	<u>Sample Size</u>
All Institutions (γ)	33.5	33.4	18.9	349
Five Largest Institutions	15.5	15.0	8.3	302
Directors & Officers (α)	11.2	5.7	12.3	348
All "5-Percent Owners" ^b	8.6	4.9 ^b	12.3	232
Two Largest "5-Percent Owners" ^b	7.6	4.2	10.9	232
Market Value of Equity ^c	801.7	310.5	1354.6	356

^a The sample size is 356 in Panels A and B.

^b The SEC defines owners having *joint* or sole control over 5 percent or more of the outstanding equity as "5-percent owners." We report only the sole ownership of such owners, excluding directors and officers of the firm. Thus, the ownership reported here can be less than 5 percent. See also footnote 7 in the paper.

^c In millions of inflation-adjusted 1985 dollars.

Panel B shows that three-fourths of the atca proposals are fair price provisions, with an additional 15 percent being various supermajority provisions. Panel C presents summary statistics of the stockholdings by institutions, managers, and 5-percent blockholders. The average institutional holding (γ) in these firms is 33.5 percent. The ownership by the five largest institutional owners in each firm represents, on average, close to one-half of this total. The average holding of directors and officers (α) represents an additional 11.2 percent of the equity, with a median of 5.7 percent. The average sole ownership of all "5-percent hold-

owners (individuals or partnerships) bearing the same last names as any of the directors or officers. We may, however, have been unable to exclude all of the ownership controlled by managers (e.g., ownership by relatives having different last names).

ers," who are not directors or officers of the firm, is 8.6 percent (median = 4.9 percent).⁷ The average sole ownership of the two largest 5-percent holders is 7.6 percent (median = 4.2 percent). The average market value of equity of the sample firms is \$801.7 million (median = \$310.5 million) in inflation-adjusted 1985 dollars.

Unlike many other corporate events, atca proposals are rarely reported by the press. The first public release of information about these proposals occurs when the firm mails the proxy statement containing the proposal to shareholders. Consequently, we define the proxy mailing date as the announcement date. We use the market model to measure the market reaction to an atca proposal. The methodology is discussed in the Appendix. We use daily stock returns for days -100 to $+100$ around the announcement date (day 0) for each sample firm and the return on the NYSE and AMEX value weighted market index from the CRSP files. This data requirement is met by 356 firms. Of these, the data on the aggregate ownership of all institutions, directors and officers, and both, are available for 349, 348, and 341 firms, respectively.

Panel A of Table 2 presents the cumulative average abnormal returns (CAARs) and their test statistics over several intervals leading up to day 0 or $+1$. Over the period $(-40, +1)$, the CAAR is a statistically significant -2.6 percent. Only 41.7 percent of the cumulative abnormal returns (CARs) over this period are positive. This percentage is significantly less than 50. Over $(-20, +1)$, the CAAR is a statistically significant -1.3 percent. However, over shorter intervals around the announcement day, the CAARs are insignificant. Linn and McConnell (1983) report that the date of the board of directors' approval of an atca proposal precedes the mailing date of the proxy statement containing it by a median of 24 trading days. Thus, for the majority of the sample, the period of 40 trading days before proxy mailing is likely to include the Board meeting date. The negative price reaction over this period may be due to the leakage of information about a forthcoming atca proposal. Consequently, we examine the stock price reaction over this period. We present the results of the tests in Section V over a two-month window $(-40, +1)$, a one-month window $(-20, +1)$, and an announcement period window $(-1, 0)$.

In Section I, we hypothesize that firms proposing atcas may belong to two groups: one group whose proposals have a positive effect on shareholders' wealth, and another group with a negative effect. Thus, while atca proposals of each group may have important wealth consequences for their shareholders, the average effect is relatively small. To examine this issue, we present, in Panel B of Table 2, summary statistics on the distribution of CARs. The average CAR over the interval $(-40, +1)$, is -2.6 percent, but stockholders of a majority of the firms experience substantial wealth changes of over 7 percent in absolute

⁷ Notice that the median sole ownership of the group of all "5-percent owners" is less than 5 percent. This is because shareholders are classified by the SEC as "5-percent owners" based on their "total ownership" of any shares over which they have sole or shared powers of voting or investment. We report only the ownership over which they have sole voting power. This procedure avoids the double counting due to overlapping ownership among 5-percent owners, which results in the "total ownership" of all such owners being over 100 percent in several cases. The average "total ownership" of the two largest and of all "5-percent owners" is 14.0 percent and 16.1 percent, respectively.

TABLE 2
 Summary and Test Statistics for Cumulative Abnormal Returns (CARs)
 around the Announcement of Antitakeover Amendment Proposals
 by 356 Firms over the Period 1979 to 1985

	Time Period				
	(-40, +1)	(-20, +1)	(-10, +1)	(-1,0)	(-1, +1)
<i>Panel A. Averages & Test Statistics</i>					
CAAR (%)	-2.6	-1.3	-0.4	0.2	0.2
z-Statistic	-3.23***	-1.81*	-0.53	1.02	1.23
% of Positive CARs	41.7	46.2	45.9	47.6	48.4
z-Statistic	-3.12***	-1.38	-1.49	-0.85	-0.53
<i>Panel B. Distribution of CARs</i>					
Minimum	-64.1%	-32.6%	-22.9%	-7.6%	-11.5%
First Quartile	-10.6	-5.4	-4.4	-1.5	-1.9
Median	-2.1	-0.9	-0.6	-0.1	-0.1
Third Quartile	7.3	5.0	3.6	1.6	2.0
Maximum	38.4	32.0	23.9	15.6	20.8

CAAR = Cumulative Average Abnormal Returns.

The z-statistic for percent positives is for the difference from 50 percent.

*,*** Indicates statistical significance at the 10-percent and 1-percent levels, respectively, in a two-tail test.

value, as seen from the interquartile range of -10.6 percent to $+7.3$ percent. Similarly, over $(-20, +1)$, while the average CAR is -1.3 percent, a majority of the firms experience wealth changes of over 5 percent in absolute value. Thus, it appears that stockholders of a large number of firms experience substantial changes in their wealth around the announcement of an atca proposal.

V. Tests of the Hypotheses

We first examine the relation between the equity ownership of large shareholders and the changes in stock prices around the announcements of atca proposals. The active monitoring hypothesis predicts a positive relation between these variables, while the passive voting hypothesis predicts no relation. Second, we examine the relation between managerial holdings and stock price changes. As discussed in Section II, the possible sign of this latter relation is an empirical issue.

As a test of the first issue, we rank-order the firms by their proportional institutional ownership (γ) in ascending order, and subdivide them into three equal-sized portfolios.⁸ Thus, portfolio 1 contains one-third of the sample firms with the lowest γ , and portfolio 3 contains the one-third with the highest γ . We then compute the CAAR for each portfolio over the three event windows. The active monitoring hypothesis predicts that the CAARs should be increasing over the three portfolios, while the passive voting hypothesis predicts that the CAARs should not be significantly different from each other. Table 3 presents the results of this examination.

⁸ The analyses of Tables 3 to 5 were replicated with five and ten equal-sized portfolios, with similar results.

TABLE 3

The Relation between Institutional Ownership and the Wealth Effects of Atca Proposals
Cumulative Average Abnormal Returns (CAARs) and the Percentage of Positive Residuals
around the Announcement of Antitakeover Amendment Proposals for Three Portfolios
Ranked by Institutional Ownership (γ)

Portfolios Ranked by γ	Sample Size		Time Period		
			(-40, +1)	(-20, +1)	(-1,0)
1 (Lowest)	117	CAAR	-6.4% (-4.01)***	-3.2% (-2.51)**	-0.2% (-0.78)
		% Positive	31.0% (-4.31)***	40.5% (-1.99)**	39.7% (-2.18)**
2	116	CAAR	-1.2 (-0.86)	-0.3 (-0.16)	0.2 (0.80)
		% Positive	46.6 (-0.65)	51.7 (0.28)	47.4 (-0.46)
3 (Highest)	116	CAAR	-0.6 (-0.98)	-0.6 (-0.61)	0.4 (1.41)
		% Positive	46.6 (-0.65)	46.6 (-0.65)	54.3 (0.84)
z-Statistic for the difference (3) - (1)		CAAR	2.14**	1.34	1.55
		% Positive	2.59***	0.94	2.14**
F-Test Probability			0.00***	0.02**	0.35
Kruskal-Wallis Test Probability			0.04**	0.12	0.12

Notes: Numbers in parentheses are z-statistics. In case of CAAR, these are for the difference from zero; in case of percent positive, these are for the difference from 50.

*, **, *** Indicate statistical significance at the 10-percent, 5-percent, and 1-percent levels, respectively, in a two-tail test.

The CAAR for the lowest γ portfolio (portfolio 1) is a statistically significant -6.4 percent over (-40, +1) and -3.2 percent over (-20, +1). For the other two portfolios, it is insignificantly different from zero. The percentage of positive CARs for portfolio 1 is significantly less than 50 over all three event windows. For the other two portfolios, it is indistinguishable from 50. Over the announcement period (-1,0), the CAAR is insignificant for all three portfolios, but is in ascending order over the three γ portfolios. The difference between the CAARs of portfolios 1 and 3 is statistically significant at the 5-percent level for the interval (-40, +1).⁹ The difference between the percentage of positive CARs of these portfolios is significant at the 1-percent level over (-40, +1), and at the 5-percent level over (-1,0). The *F*-test (see the Appendix) allows rejection of the null hypothesis of equal CARs in the three portfolios at the 1-percent level over the interval (-40, +1), and at the 2-percent level over (-20, +1). The Kruskal-Wallis test allows its rejection at the 4-percent level over the interval (-40, +1). Overall, then, these findings suggest that the stock market reaction to atca proposals is more favorable the larger the institutional ownership. This is consistent with the active monitoring hypothesis. One can argue that the incentives of managers proposing atcas may be partially anti-

⁹ The formula for computation of the z-statistic is shown in the Appendix.

pated by investors because institutional ownership is observable. Thus, a part of the monitoring effect may already be reflected in the stock price. Therefore, our results are likely to be underestimates of the true magnitude of this relation.¹⁰ Overall, this evidence appears to be inconsistent with the passive voting hypothesis.

DeAngelo and Rice (1983) argue that the purpose of an atca is to encourage a cartelized response by shareholders to a takeover bid. One can argue that firms with large institutional holdings (γ) already have such a mechanism in place. Such firms, then, have less of a need for an atca. Thus, an implication of this argument is that γ should be lower in firms that adopt atcas than in the universe of all firms. We find that the average γ in our sample is 33.5 percent. According to the 1985 *Spectrum* Survey, the average γ of all firms in 1984 is 35.9 percent. Thus, the institutional ownership among atca-adopting firms does not appear to be significantly lower than in other firms.¹¹

It could be argued that the implication of the active monitoring hypothesis, namely that there is a positive relation between the stockholder wealth effects of atca proposals and the ownership of institutions, is also shared by the managerial entrenchment hypothesis. The larger the fraction of equity owned by managers (α), the greater is the power they obtain through an atca to block a future hostile bid for control of the firm and, therefore, the more negative is the effect on the wealth of stockholders (as measured by CAR). However, the larger the α , the more likely it is that the fraction of equity owned by other large blockholders such as institutions (γ) will be lower. We may, then, observe a spurious positive relation between CAR and γ . As discussed in Section II, however, managers with equity investments in the firm face personal wealth trade-offs when considering a hostile bid for control of the firm. The two effects tend to counteract each other. Therefore, it is not clear that as α increases, managers are more likely to resist hostile takeover bids.

In the analysis above, we have used the percentage of outstanding equity owned by institutions. One also would expect that stockholders who have a large *dollar* investment in the common stock of a firm have greater incentives to monitor managers. Therefore, we have conducted an analysis similar to Table 3, but based on the dollar value of institutional ownership (VINST) instead of γ . Consistent with the prediction of the active monitoring hypothesis, the CAAR is increasing over the three ascending-order VINST portfolios in each time interval examined. The CAAR for portfolio 1 (lowest VINST) is significantly negative over the longer windows. Over the intervals $(-40, +1)$ and $(-20, +1)$, it is -5.4 percent and -2.6 percent (with z-statistics of -3.09 and -1.89), respectively. For the other two portfolios, it is insignificant. These findings lend credence to the above hypothesis that stockholders with large dollar investments in the common stock of a firm play an important role in monitoring managers.

¹⁰ We are grateful to Chuck Knoeber for pointing this out to us.

¹¹ There were only 11 firms in our sample that proposed these amendments twice. The average γ in these firms is 40.2 percent and 50.1 percent at the time of their first and second proposals, respectively. Thus, institutional ownership in these firms is larger than in the rest of the sample, and gets higher at the time of their second proposal than the first. This finding also runs contrary to the implication of the above argument.

A. Concentration of Institutional Ownership

In the above analysis, we use the equity ownership by *all* institutions as a proxy for the degree of monitoring. Casual evidence suggests that institutions sometimes engage in joint monitoring of managers (see, e.g., the reference in footnote 2). Nevertheless, there may be a positive relation between the *concentration* of ownership among institutions and the resources devoted to monitoring. To address this issue, we compute for each firm the Herfindahl Index of concentration of institutional ownership as follows,

$$\text{HI5} = \sum_{i=1}^5 \gamma_i^2,$$

where γ_i is the percentage of equity owned by institution i , and $i = 1, 2, \dots, 5$ are the five institutions with the largest γ 's. We rank the firms by the ascending order of HI5, subdivide them into three equal-sized groups, and examine the CARs in each group. Table 4 presents the results of this analysis.

There seems to be a positive relationship between the concentration of institutional ownership and abnormal returns. The CAAR for the group of firms with the lowest HI5 (portfolio 1) is a statistically significant -3.8 percent over $(-40, +1)$ and -2.6 percent over $(-20, +1)$. It is insignificant or positive for the other two portfolios. This pattern is reinforced by the results of the sign test. The percentage of positive CARs in portfolio 1 is about 37, which is significantly less than 50 in each of the three intervals; for the other two portfolios, it is indistinguishable from 50. The percent positive in portfolio 3 is significantly larger than in portfolio 1 over the announcement period. The F -test allows rejection of the null hypothesis of equal CARs among the three portfolios at the 3-percent level over all three event intervals. The Kruskal-Wallis test allows its rejection at the 2-percent level over the interval $(-1, 0)$, and at the 10-percent level over $(-20, +1)$. Overall, the results of this analysis tend to reinforce the earlier results in Table 3.¹² Both are consistent with the active monitoring hypothesis, rather than the passive voting hypothesis.

B. Five-Percent Blockholders

Next, we examine the ownership of another group of large shareholders, viz., the owners of 5 percent or more of the outstanding equity. This percentage is considered to be significant, because it represents a rather substantial investment on the part of a single investor and the SEC requires the filing of a special report (Form 13D) upon its acquisition or accumulation. For each firm in the sample, we compute FIVE2, the percentage of equity owned (over which they have sole voting power) by the two largest 5-percent blockholders, who are not directors or officers of the firm. We next perform an analysis similar to that in Table 4, ranking the firms by the ascending-order of FIVE2, subdividing them into three equal-sized groups, and examining the CAAR and the percent of positive CARs in each group. The results are shown in Table 5.

¹² We also examined portfolios based on three other measures of ownership concentration, viz. the percentages owned by, respectively, the one, two, and five institutions with the largest holdings in each sample firm. The results are similar.

TABLE 4

The Relation between the Concentration of Institutional Ownership and the Wealth Effects of Atca Proposals

Cumulative Average Abnormal Returns (CAARs) and the Percentage of Positive Residuals around the Announcement of Antitakeover Amendment Proposals for Three Portfolios Ranked by the Herfindahl Index of Ownership Concentration among the Five Largest Institutional Owners (HI5)^a

Portfolios Ranked by HI5	Sample Size		Time Period		
			(-40, +1)	(-20, +1)	(-1, 0)
1 (Lowest)	101	CAAR	-3.8% (-2.71)***	-2.6% (-2.30)**	-0.5% (-1.23)
		% Positive	36.6% (-2.68)***	38.6% (-2.25)**	37.6% (-2.46)**
2	101	CAAR	-1.6 (-0.80)	-0.7 (-0.41)	0.6 (2.09)**
		% Positive	41.6 (-1.62)	48.5 (-0.20)	53.5 (0.60)
3 (Highest)	100	CAAR	-0.9 (-1.55)	0.2 (-0.01)	0.2 (0.76)
		% Positive	46.0 (-0.70)	50.0 (-0.10)	53.0 (0.50)
z-Statistic for the difference (3)-(1)		CAAR	0.82	1.62	1.40
		% Positive	1.40	1.52	2.10**
F-Test Probability			0.03**	0.03**	0.03**
Kruskal-Wallis Test Probability			0.34	0.10*	0.02**

^a HI5 = $\sum_{i=1}^5 \gamma_i^2$, where γ_i is the percentage of outstanding equity owned by the i th institution, and $i = 1, \dots, 5$ are the five institutions with the largest γ 's.

See notes to Table 3.

Over the interval $(-40, +1)$, the CAAR for the portfolio with the lowest ownership by 5-percent owners is -3.3 percent (with a Z-statistic of -1.91), and the percent positive is 34.6 (with a Z-statistic of -2.74). Over the same interval, the CAARs for the other two portfolios are insignificant. Thus, the evidence on 5-percent blockholders also is consistent with the active monitoring hypothesis, despite the possibility that, as discussed in footnote 6, we may have been unable to exclude all of the ownership controlled by managers.¹³

C. Managerial Ownership

The second issue we address is the relation between managerial equity ownership (α) and the wealth effects of atcas on shareholders. We rank order the firms by the ascending order of α and subdivide them into three equal-sized port-

¹³ We also examine the sole ownership of the largest and the five largest 5-percent owners. The results are similar. In addition, for each group, we also examine two other measures of their ownership. The first measure is their "total ownership," as defined in footnote 7. This measure adds up to over 100 percent in many cases. Therefore, we also examine a second measure, defined as the sole ownership of all members of the group plus the highest of the shared voting ownership. The results are similar to those presented here.

TABLE 5
 Cumulative Average Abnormal Returns (CAARs) and Percent of Positive Residuals around the Announcement of Antitakeover Amendment Proposals for Three Portfolios Ranked by the Sole Percent Ownership of the Two Largest 5-Percent Blockholders (FIVE2)

Portfolios Ranked by FIVE2	Sample Size		Time Period		
			(-40, +1)	(-20, +1)	(-1, 0)
1 (Lowest)	78	CAAR	-3.3% (-1.91)*	-1.2% (-0.86)	-0.04% (-0.02)
		% Positive	34.6% (-2.74)***	46.2% (-0.57)	47.4% (-0.34)
2	77	CAAR	-0.6 (-0.58)	-0.1 (-0.25)	0.5 (2.08)**
		% Positive	44.2 (-0.92)	48.0 (-0.23)	59.7 (1.63)
3 (Highest)	77	CAAR	0.6 (-0.09)	-0.4 (-0.30)	0.4 (0.81)
		% Positive	46.8 (-0.46)	48.0 (-0.23)	46.8 (-0.46)
z-Statistic for the difference (3) - (1)		CAAR	1.29	0.39	0.59
		% Positive	1.61	0.24	-0.08
F-Test Probability			0.14	0.63	0.30
Kruskal-Wallis Test Probability			0.39	0.86	0.23

See notes to Table 4.

folios. Over the interval $(-40, +1)$, the CAARs for portfolios 1 (lowest α) and 3 (highest α) are -2.9 percent and -2.6 percent, respectively, and are both statistically significant. The difference is statistically insignificant. Over the other intervals, the CAARs for all three portfolios are insignificant. Thus, we do not find any evidence that managerial equity ownership, by itself, has an effect on the type of atca (i.e., good or bad). This may be because the two effects discussed earlier (see Section II) cancel each other out, or because of missing variables.

D. Multivariate Regression Analysis

Finally, we examine whether there is a linear relationship between the wealth effects of atcas (CARs) and institutional holdings (γ). In doing this, we have to control for several factors that may be important in determining the wealth effects of atca proposals. First, we have to control for managerial ownership, α . In the preceding analysis, we have not found a relation between CARs and α ; however, this may be due to missing variables.

Second, the perquisites available to managers tend to be greater in larger firms (e.g., the use of corporate jets), and thus their incentives to oppose takeovers can be more pronounced. This suggests that the wealth effects of an atca are negatively related to firm size, which we measure by the market value of equity. Because the distribution of the market value of equity has several outliers, we use its natural log, LEQUITY, as an explanatory variable.

Third, Jarrell and Poulsen (1987) find important differences between the stock price reaction to atcas of different types. The sample examined here contains five types of atcas. Therefore, we add four intercept dummy variables to the regression model: CB, AP, SM, and SMB are equal to one if the atca proposed is, respectively, a classified board, authorized preferred, supermajority voting, or supermajority with board-out; they are zero otherwise. The base case is a fair price provision (reflected in the constant term).

Fourth, the role of institutional monitoring may differ by the type of atca. Therefore, we also examine four interactive variables, where γ is multiplied by each of the four dummy variables for the type of atca, described above. We include the intercept dummies and the interactive variables to capture any differences in relations between the abnormal returns and the independent variables by the type of atca. We estimate the following linear equation,¹⁴

$$(1) \quad \text{CAR}_i = b_0 + b_1 \gamma_i + b_2 \alpha_i + b_3 \text{LEQUITY}_i + b_4 \text{CB}_i + b_5 \text{AP}_i + b_6 \text{SM}_i \\ + b_7 \text{SMB}_i + b_8 \gamma_i \text{CB}_i + b_9 \gamma_i \text{AP}_i + b_{10} \gamma_i \text{SM}_i + b_{11} \gamma_i \text{SMB}_i + e_i .$$

Table 6 shows the OLS estimates of Equation (1) for the three event windows used to measure CAR. There is a positive linear relation between CAR and γ . This relation is statistically significant for fair-price provisions, supermajority provisions, and supermajority with board-out provisions. For the latter, the CAR over the interval $(-40, +1)$ increases by as much as 0.5 percent for each percentage increase in γ . This finding is consistent with the prediction of the active monitoring hypothesis, namely that the monitoring of managers increases with institutional ownership. The coefficient of α is insignificant in all estimations. This finding suggests that, as discussed in Section II, the effects of atcas on the human capital component and the equity ownership component of managers' wealth tend to cancel out. The coefficient of LEQUITY is significantly negative in two of the estimations, suggesting that the stockholder wealth effects of an atca tend to be more harmful for larger firms.¹⁵

The intercept estimates for the different types of atcas also are interesting. Supermajority voting with a board-out clause has a markedly negative effect.¹⁶ This may be because, as mentioned in the Introduction, the provision gives almost a blanket power to managers to combat takeovers and to discriminate between bidders. Supermajority voting provisions and authorization of preferred stock have a significantly negative effect on CARs over the periods $(-20, +1)$ and $(-40, +1)$, respectively. The average effects of the adoption of classified board and fair price provisions are not significantly different from zero (as seen from the insignificant coefficients of CB and the constant term).

The finding of negative coefficients of SM and SMB and positive coefficients of their interactions with γ is consistent with two possible interpretations. First, in the absence of institutional ownership, firms are more likely to propose

¹⁴ The specific form of this regression was suggested by George Benston.

¹⁵ Not surprisingly, institutional ownership (γ) and the market value of equity have a significant positive correlation (+0.37). Thus, because of multicollinearity, the t -statistics in the regressions are likely to be underestimates.

¹⁶ This result is not driven by outliers. Of the 26 firms adopting this provision, the CAR is negative for 20 firms during the interval $(-40, +1)$ and for 22 firms over $(-20, +1)$.

TABLE 6

Cumulative Abnormal Returns (CARs) around the Announcement of Antitakeover Amendment Proposals Regressed on the Percentage Ownership of Institutions (γ) and Directors & Officers (α), Firm Size, Type of Amendment, and Interaction Variables

$$CAR_i = b_0 + b_1\gamma_i + b_2\alpha_i + b_3LEQUITY_i + b_4CB_i + b_5AP_i + b_6SM_i + b_7SMB_i + b_8\gamma_i CB_i + b_9\gamma_i AP_i + b_{10}\gamma_i SM_i + b_{11}\gamma_i SMB_i + e_i$$

LEQUITY is the natural log of the market value of equity of the firm. CB, AP, SM, and SMB are dummy variables equal to 1, if the proposal is a classified board, authorized preferred, supermajority, and supermajority with board out clause, respectively; otherwise, they equal 0.

Independent Variables	Dependent Variable		
	CAR(-40, +1)	CAR(-20, +1)	CAR(-1, 0)
Constant	-0.36 (-0.08)	1.59 (0.54)	0.69 (0.79)
γ	0.12 (1.73)*	0.07 (1.65)*	0.03 (2.21)**
α	0.12 (1.45)	0.04 (0.74)	0.005 (0.32)
LEQUITY	-1.14 (-1.43)	-0.90 (-1.72)*	-0.29 (-1.89)*
CB	-9.28 (-0.61)	4.15 (0.41)	-1.36 (-0.46)
AP	-14.05 (-1.76)*	-3.15 (-0.60)	0.98 (0.63)
SM	-6.62 (-1.24)	-7.20 (-2.06)**	-0.10 (-0.10)
SMB	-19.34 (-3.91)***	-10.52 (-3.25)***	-0.28 (-0.29)
γ CB	0.15 (0.49)	-0.10 (-0.50)	0.04 (0.65)
γ AP	0.24 (1.30)	-0.003 (-0.02)	-0.001 (-0.01)
γ SM	0.27 (1.72)*	0.26 (2.55)**	0.02 (0.67)
γ SMB	0.50 (2.51)**	0.35 (2.69)***	-0.003 (-0.09)
Adjusted R^2	0.06	0.04	0.003
F-Stat.	2.96***	2.36***	1.10

Notes: The numbers in parentheses are t -statistics. Sample size is 341 in all regressions.

*, **, *** Indicate statistical significance at the 10-percent, 5-percent, and 1-percent levels, respectively, in a two-tail test.

atcas that are detrimental to the wealth of shareholders. As institutional ownership in the firm increases, managers tend to propose amendments that are more in the interest of shareholders. The second interpretation is that the adoption of (at least certain types of) atcas has a negative effect on stockholders' wealth. But this effect is not as damaging in firms with larger institutional ownership, due to greater monitoring by institutions and their greater voting power in case of a takeover bid.¹⁷ While the two interpretations differ with respect to the hypothesized effect of monitoring by institutions on the specific actions of managers,

¹⁷ We are grateful to Andrei Shleifer for pointing this out to us. Brickley, Lease, and Smith ((1988), p. 283) make a similar, though somewhat different, point.

both are consistent with the active monitoring hypothesis, rather than the passive voting hypothesis.

E. Other Interpretations of the Results

Two other interpretations of our findings are also possible.

1. The Takeover Forecasting Hypothesis

The “takeover forecasting hypothesis” is a combination of two hypotheses. First, the announcement of an atca proposal may signal an increase in the probability of a takeover, which leads to positive abnormal returns. Second, institutions may be better than the rest of the market at predicting takeover targets. Thus, the positive association that we document between abnormal returns and institutional ownership may simply reflect the institutions’ superior forecasting ability, rather than any monitoring.

There are three points to be made on this issue. First, there is mixed evidence on the effect of an atca announcement on the probability of a takeover bid. Pound (1987) finds that firms receive takeover bids less frequently subsequent to atca adoptions. On the other hand, Keown, MacDonald, and Pinkerton (1986) report that, consistent with the takeover signalling hypothesis, firms that do not receive takeover bids within two years after the adoption of an atca, experience negative abnormal returns over that period.

Second, the abnormal returns around atca announcements are *negative*. This may be because an atca announcement also signals greater managerial resistance to a takeover bid, which reduces the probability of a successful takeover. Pound (1987) finds that managers of firms with atcas oppose takeover bids almost twice as frequently as firms without atcas, and are more successful in warding off hostile takeover attempts.

Third, Jarrell, Lehn, and Marr (1986) report that targets of tender offers have significantly *lower* institutional ownership than do nontargets. This finding may partly reflect the fact that takeover targets tend to be smaller firms, which usually have lower γ 's. Thus, the takeover forecasting hypothesis, while logical, seems to lack empirical support. The jury is still out on this issue.

2. The Superior Management Hypothesis

This hypothesis holds that institutions have greater ability to identify firms with superior management. Such firms are less likely to propose atcas harmful to shareholder wealth. Thus, the finding that γ is larger for firms with positive abnormal returns may not be due to any monitoring by institutions, but rather due to their ability to identify firms with better management. If, however, managers of a high γ firm pursue the interests of their shareholders, it is difficult to say whether this is because the managers are intrinsically good or due to the greater monitoring by institutions. Thus, this hypothesis cannot be ruled out.

VI. Summary and Conclusions

This study provides some evidence that directly pertains to recent controversies surrounding the role of institutional ownership in monitoring managers and

the effects of antitakeover charter amendments (atcas) on shareholders' wealth. We attempt to distinguish between two competing hypotheses about the monitoring role of large shareholders. The "active monitoring hypothesis" predicts a positive relation between the stock price reaction to announcements of atca proposals and institutional ownership; the "passive voting hypothesis" predicts no relation. We also examine the relation between managerial equity holdings and the wealth effects of atca proposals.

We find a significantly positive relation between changes in the wealth of shareholders around the announcements of atca proposals and the proportion of equity owned by institutions (γ). Over the interval $(-40, +1)$ around the announcement date, the shareholders of the one-third of the sample firms with the lowest γ suffer a statistically significant loss of 6.4 percent of their wealth, while the wealth of stockholders of the remaining firms does not change significantly.

The positive relation between institutional ownership and the wealth effects continues to hold for various types of amendments, even after controlling for the concentration of ownership among institutions, managerial equity ownership, and firm size. This evidence is consistent with the "active monitoring hypothesis" proposed by Demsetz (1983) and Shleifer and Vishny (1986) that the existence of large blockholders leads to better monitoring of managers. Our evidence seems to contradict the hypothesis that institutions are passive owners. We also examine the relation between abnormal returns and the holdings of owners of 5 percent or more of the outstanding equity. This analysis also supports the active monitoring hypothesis.

We do not find a relation between managerial equity ownership and the wealth effects of atcas. This may be due to the countervailing effects of antitakeover amendments on the human capital component and the equity ownership component of the wealth of managers.

Appendix

The market model postulates the following relation for stock returns,

$$r_{it} = a_i + b_i r_{mt} + e_{it},$$

where r_{it} = the return on the security i on day t ,

r_{mt} = the return on the market portfolio
(NYSE + AMEX value weighted index) on day t ,

e_{it} = the error term for security i on day t ,

and a_i, b_i = parameters for security i .

The excess return (residual) for security i on day t around the announcement date (day 0) is measured as

$$\hat{e}_{it} = r_{it} - \hat{a}_i - \hat{b}_i r_{mt}, \quad t = -40 \text{ to } +40.$$

To reduce the probability of systematic measurement errors due to a possible shift in the market model parameters following the event announcement, we esti-

mate these parameters twice. First, we estimate them over the interval $(-100, -41)$. We use these estimates to compute \hat{e}_{it} for the period $(-40, -1)$. We then reestimate them over the interval $(+41, +100)$ to compute \hat{e}_{it} over the period $(0, +4)$.

The average abnormal return on day t is measured as

$$\text{AAR}_t = \sum_{i=1,n} \hat{e}_{it} / n ,$$

with the z-statistic

$$Z_t = \sum_{i=1,n} (\hat{e}_{it} / s_{it}) / n^{1/2} ,$$

where $s_{it} = s_i [1 + 1/T + (r_{mt} - r_m)^2 / \{(T-1)\text{var}_m\}]^{1/2}$,

s_i = standard deviation of \hat{e}_{it} over the estimation period,

r_m = mean of r_{mt} over the estimation period,

var_m = variance of r_{mt} over the estimation period,

T = length of the estimation period (60 days),

and n = sample size.

The cumulative abnormal return for firm i over the period $t1$ to $t2$ is measured as

$$\text{CAR}_{t1,t2}^i = \sum_{t=t1,t2} \hat{e}_{it} ,$$

with the z-statistic

$$Z_{t1,t2}^i = \sum_{t=t1,t2} (\hat{e}_{it} / s_{it}) / (t2 - t1 + 1)^{1/2} .$$

The cumulative average abnormal return over the period $t1$ to $t2$ is measured as

$$\text{CAAR}_{t1,t2} = \sum_{i=1,n} \text{CAR}_{t1,t2}^i / n ,$$

with the z-statistic

$$Z_{t1,t2} = \sum_{i=1,n} Z_{t1,t2}^i / n^{1/2} .$$

The z-statistic to measure the significance of the difference between the CAARs or PPs of two portfolios is given by

$$Z = \left[Z_1(n_2)^{1/2} - Z_2(n_1)^{1/2} \right] / (n_1 + n_2)^{1/2} ,$$

where Z_1 = the z-statistic for CAAR or PP of portfolio 1,

Z_2 = The z-statistic for CAAR or PP of portfolio 2,

n_1 = sample size of portfolio 1,

and n_2 = sample size of portfolio 2.

The F -statistic is from the OLS estimate of the equation,

$$\text{CAR}_i = b_0 + b_1 P1_i + b_2 P2_i + b_3 P3_i + e_i,$$

where $P1$, $P2$, and $P3$ are dummy variables equal to 1 if firm i belongs to the one-third of the sample with the lowest, medium, and highest γ , respectively; they are zero otherwise. The null hypothesis is that $b_1 = b_2 = b_3 = 0$.

References

- Bradley, M., and L. Wakeman. "The Wealth Effects of Targeted Share Repurchases." *Journal of Financial Economics*, 11 (April 1983), 301–328.
- Brickley, J.; R. Lease; and C. Smith. "Ownership Structure and the Monitoring of Managers." *Journal of Financial Economics*, 20 (March 1988), 267–291.
- Dann, L., and H. DeAngelo. "Standstill Agreements, Privately Negotiated Stock Repurchases, and the Market for Corporate Control." *Journal of Financial Economics*, 11 (April 1983), 275–300.
- _____. "Corporate Financial Policy and Corporate Control: A Study of Defensive Adjustments in Asset and Ownership Structure." *Journal of Financial Economics*, 20 (Jan./March 1988), 87–127.
- DeAngelo, H., and E. Rice. "Antitakeover Charter Amendments and Stockholder Wealth." *Journal of Financial Economics*, 11 (April 1983), 329–360.
- Demsetz, H. "The Structure of Ownership and the Theory of the Firm." *Journal of Law and Economics*, 26 (June 1983), 375–390.
- Gilson, R. *The Law and Finance of Corporate Acquisitions*. Mineola, NY: Foundation Press, Inc. (1986).
- Jarrell, G.; K. Lehn; and W. Marr. "Institutional Ownership, Tender-Offers and Long-Term Investments." Working Paper, Securities and Exchange Commission (1986).
- Jarrell, G., and A. Poulsen. "Shark Repellents and Stock Prices: The Effects of Antitakeover Amendments since 1980." *Journal of Financial Economics*, 19 (Sept. 1987), 127–168.
- Jensen, M. "Capital Markets, Organizational Innovation, and Restructuring." Working Paper, Harvard Business School (Jan. 1989).
- Keown, A.; J. MacDonald; and J. Pinkerton. "An Empirical Examination of the Informational Effect of Antitakeover Amendments." Working Paper, Virginia Polytechnic Institute and State Univ. (1986).
- Linn, S., and J. McConnell. "An Empirical Investigation of the Impact of 'Antitakeover' Amendments on Common Stock Prices." *Journal of Financial Economics*, 11 (April 1983), 361–399.
- Malatesta, P., and R. Walkling. "Poison Pill Securities: Stockholder Wealth, Profitability, and Ownership Structure." *Journal of Financial Economics*, 20 (Jan./March 1988), 347–376.
- Pound, J. "The Effects of Antitakeover Amendments on Takeover Activity: Some Direct Evidence." *Journal of Law and Economics*, 30 (Oct. 1987), 353–367.
- _____. "Proxy Contests and the Efficiency of Shareholder Oversight." *Journal of Financial Economics*, 20 (Jan./March 1988), 237–265.
- Ryngaert, M. "The Effect of Poison Pill Securities on Shareholder Wealth." *Journal of Financial Economics*, 20 (Jan./March 1988), 377–417.
- U.S. Securities and Exchange Commission. *Institutional Investors and Corporate Stock: A Background Study*, R. Goldsmith, ed. Cambridge, MA: National Bureau of Economic Research (1973).
- Shleifer, A., and R. Vishny. "Large Shareholders and Corporate Control." *Journal of Political Economy*, 94 (June 1986), 461–488.