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THE ANTECEDENTS OF BLOCK SHARE PURCHASES

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The Antecedents of Block Share Purchases

ABSTRACT

This study investigates the determinants of block purchases of shares between 1981 and 1989 in *Fortune* 500 firms that survived the period. We find that poor accounting performance increased the likelihood of block purchase, consistent with theory suggesting that block purchases are intended to discipline managers. We also find that neither diversification nor defensive measures such as dual-class stock, shark repellents, and ESOPs had any statistically significant effect on the likelihood of block purchase. In contrast, firm size and insider ownership were inversely related to the likelihood of block purchase.

The demise of the hostile takeover market in the late 1980s has heightened interest in alternative mechanisms of corporate control, particularly in the role played by activist shareholders. A well-functioning market for corporate control reliant on shareholder activism calls for large shareholders to target under-performing firms without being deterred by corporate defenses. Consistent with the view that large shareholders can effectively play this role, existing studies show that block share purchases are followed by increases in share value, change in management and redirection of corporate policies.¹ However, the determinants of blockholder activity remain poorly understood. Specifically, are the firms most in need of redirection targeted by large shareholders?

This study documents the determinants of block purchases by outside investors by addressing the following questions. First, do outside blockholders predominantly target poorly performing firms? Second, are diversified firms more likely to be targeted by outside blockholders than more focused firms? Mounting evidence indicates that an important goal of restructuring in the 1980s was to reverse inefficient diversification among large firms.² Blockholders may have played an important role in catalyzing corporate refocusing. Finally, are block purchases deterred by defensive mechanisms such as dual-class stock structures, ESOPs, shark repellents, and incorporation in a state with anti-takeover statutes? Defensive mechanisms may dilute incentives to buy large blocks of stock by reducing outside shareholder voting power. Defenses should have little effect on the incidence of blockholder activity in a well-functioning market for corporate control.

Our main findings, based on an analysis of the determinants of block purchases in a sample of 264 Fortune 500 firms that survived the 1980s, are fourfold:

(i) Block share purchases by outsiders are most likely to occur when target firms have low accounting performance. This supports previous theory and evidence that blockholders discipline managers of under-performing firms.

- (ii) A company's diversification policy does not affect the likelihood of a large block purchase by outside investors. This suggests that diversified firms do not provide more attractive arbitrage opportunities for buyers of blocks of stock than do more focused firms.
- (iii) Incorporation in a state with anti-takeover laws and adoption of defensive measures such as dual-class stock structures, shark repellents, and ESOPs do not reduce the likelihood of an investor purchasing a block of stock in a firm. This corroborates previous evidence that defensive mechanisms have little effect on the likelihood of takeover.
- (iv) Block purchases are less likely to occur in firms with high insider ownership and in large firms. These findings are consistent with previous evidence that firms with these characteristics experience fewer takeovers.

Overall, these findings show that block purchases are often motivated by poor target firm performance and that defensive mechanisms are ineffective in deterring large block share purchases. This suggests that the market for corporate control functions effectively to remedy the agency costs of separation of ownership and control in large corporations.

This remainder of this paper is organized as follows. Section I discusses the relationship between block purchases, defensive mechanisms, and the market for corporate control. Section II describes the sample selection procedure and data used in the study. The empirical evidence on the antecedents of block purchases is presented in Section III. Section IV summarizes our findings and concludes.

I. Blockholders and the Market for Partial Corporate Control

A. Block Purchases, Managerial Discipline, and Target Firm Performance

It is widely recognized that the interests of managers of publicly held corporations may diverge from those of stockholders. However, the degree to which managers can pursue their own interests at shareholders' expense may be moderated by the market for corporate control. Specifically, managers who do not act in shareholder interests can be replaced through takeover (Manne (1965)), or disciplined by large shareholders (i.e., blockholders). Blockholders have incentives to monitor and control managers because they internalize the benefits of these actions through their purchases (Demsetz and Lehn (1985)). Blockholders can use their voting power to promote efficient corporate policies; if managers resist changing corporate policy, blockholders can threaten to put the firm into play (Shleifer and Vishny (1986)). Empirical evidence shows that blockholders increase firm value by disciplining managers and effecting changes in corporate policy. Holderness and Sheehan (1985), for example, find that block purchases increase share value and precede changes in top management. Mikkelson and Ruback (1991) show that increases in share value following block purchases are subsequently dissipated if top management is not replaced, or if major changes in corporate policy do not take place. It is not known, however, whether blockholders systematically target poorly performing firms.

B. Diversification and Block Purchases

Diversification has been widely acknowledged as a source of poor firm performance during the 1980s. Empirical evidence provided by Lang and Stulz (1992) shows that focused firms had consistently higher Tobin's q's than did more diversified firms during the 1980s. Likewise, Comment and Jarrell (1993) show that refocusing during the 1980s increased firm value.

There are two principle explanations for the poor performance of diversified firms. First, diversification may result from inefficient expansion undertaken by managers seeking to maximize their private benefits rather than the value of the firm (Marris (1964), Jensen (1988)). In particular, Amihud and Lev (1981) and Morck, Shleifer, and Vishny (1990) argue that managers who are not large shareholders have incentives to diversify into unrelated lines of business to reduce bankruptcy risk and hence, protect the value of their human capital. Second, diversified firms may have become less efficient over time compared to more focused firms. These reason for this is that internal capital markets, on which diversified firms have historically relied, have become less efficient relative to external capital markets. Increased liquidity and a lower cost of raising funds externally may have caused more focused firms to perform better than diversified firms (Bhide (1990)).

If diversification reduces firm value, then shareholders can be expected to buy blocks of stock and refocus operations. This study investigates whether diversified firms are more likely than focused firms to become targets of block purchases. Diversified firms may also be more attractive restructuring opportunities than focused firms because correcting overdiversification may be easier than improving performance in unprofitable, but focused firms. In the former case, shareholders purchase stock and divest under-performing lines of business. In the latter case, however, restructuring typically entails complex strategies that call for detailed knowledge of operations on the part of blockholders.

C. Defensive Mechanisms and Block Purchases

Faced with hostile activist investors, self-interested managers may seek to protect their jobs and associated private consumption streams by adopting "defensive" mechanisms -- such as dualclass stock structures, shark repellents, and ESOPs -- that significantly increase the cost of takeovers and partial changes in corporate control. Managers may also re-incorporate a firm in a state with anti-takeover statutes. These mechanisms dilute incentives in the market for partial corporate control because they increase takeover costs. One way that blockholders exert their influence is to threaten to put a firm into play if managers are unwilling to improve corporate policy (DeAngelo and Rice (1983), Shleifer and Vishny (1986)). In addition, defensive mechanisms such as dual-class stock structures and super-majority provisions diminish blockholders' voting power, preventing them from using proxy contests and otherwise exercising their voting power to pressure managers to change corporate policy.

C.1 Dual-Class Stock Structures

In dual-class stock structures, only a minority of shares are accorded full voting rights; shareholders at large have less than full voting power to effect change in corporate policy.³ Consequently, if voting stock is concentrated in the hands of managers and other insiders, they can use their voting power to protect their private consumption streams against shareholder activism and takeover (Ruback (1988)). Consistent with the argument that dual-class stock structures raise

the costs of disciplining managers, Jarrell and Poulsen (1988) find that announcements of dualclass recapitalizations, especially for firms with high insider stock ownership, are accompanied by statistically significant negative price effects.⁴

C.2 Shark Repellents

Shark repellents include super-majority provisions, classified board provisions, fair price and redemption rights provisions, poison pills, and preferred stock authorizations. These provisions increase the costs of influencing firm policy because they force blockholders to incur the cost of legal challenges to restrictions on block ownership or force blockholders to incur the cost of gaining management's approval to block purchases. Consistent with the argument that shark repellents are detrimental to shareholders' interests, Jarrell and Poulsen (1987) find negative stock price reactions to announcements of anti-takeover charter amendments.⁵ Ryngaert (1988) and Malatesta and Walkling (1988) find negative stock price reactions to poison pill announcements.⁶ Despite this evidence, the effectiveness of shark repellents in actually deterring takeovers is unclear. Ambrose and Megginson (1992) find that anti-takeover charter amendments and poison pills do not reduce the likelihood of takeover, although preferred stock authorizations appear to reduce takeover frequency. Comment and Schwert (1993) also find that poison pills have no effect on the likelihood of takeover.⁷

C.3 Employee Stock Ownership Plans (ESOPs)

During the 1980s, many firms adopted ESOPs, most of which diluted the voting power of outsider investors by transferring the control of blocks of shares from outsiders to trustees elected by insiders. Although ESOPs may also serve other purposes, such as providing performance incentives to employees and tax benefits to firms, critics of ESOPs contend that they entrench incumbent management and are detrimental to shareholder interests. Consistent with this argument, Gordon and Pound (1990) find that ESOPs established in the presence of takeover activity and those that transferred control from outside shareholders reduced firm value.⁸ Similarly, Chang and Mayers (1993) find that ESOPs established by firms in which managers held a high proportion of shares reduced firm value.

C.4 Second-Generation State Anti-Takeover Statutes

Second-generation state anti-takeover statutes restrict the voting rights of large shareholders or delay mergers for periods of three to five years for companies in their jurisdiction.⁹ Critics of state anti-takeover statutes argue that they diminish the voting rights of large outside shareholders and diminish blockholders' ability to make credible takeover threats to management. Supporting the argument that anti-takeover statutes reduce shareholders' power to discipline managers, Karpoff and Malatesta (1989) and Szewczyk and Tsetsekos (1992) find negative average returns in firms affected by state anti-takeover statutes.¹⁰

D. Other Deterrents to Block Purchases

D.1 Insider Ownership

Insider share ownership can provide incentives for managers and other corporate decisionmakers to act in the interests of shareholders at large (Jensen and Meckling (1976)). However, Stulz (1988) cautions that insider ownership can also increase insiders' discretion for selfinterested behavior, because managers who own a large proportion of shares can use their voting power to resist takeovers and shareholder activism. Consistent with this argument, Morck, Shleifer, and Vishny (1988) and McConnell and Servaes (1990) find that the relationship between insider share ownership and Tobin's q is non-monotonic, showing first an increase, consistent with incentive effects, and then a decline, consistent with entrenchment. Dann and DeAngelo (1988) and Denis (1990) find that changes in corporate financial structure that increase insiders' voting power reduce firm value. These findings are consistent with the argument that insiders use their voting power to protect their private interests.

D.2 Firm Size

Target firm size is another factor that may deter block purchases by activist investors. Purchasers of blocks of shares may be limited by individual or corporate wealth constraints, and so, may be less able to buy blocks of stock in large firms (Demsetz and Lehn (1985)). Consistent with this theory, Ambrose and Megginson (1992) find that large firms are less likely to receive

takeover bids than smaller firms; Similarly, Comment and Schwert (1993) find that large firms are less likely to be taken over.

II. Sample Selection and Data

A. Sample

We test our hypotheses with an exhaustive sample of 264 *Fortune* 500 firms in 1981 that remained publicly traded through 1989. We excluded firms that merged or were acquired between 1981 and 1989, as well as foreign firms, subsidiary companies, and firms that declared bankruptcy. This sample allows us to examine changes in corporate control in the largest surviving publicly held firms in the U.S. economy. By examining surviving firms we attempt to distinguish between "toehold" block purchases made prior to takeover and disciplinary block purchases in which blockholders seek to discipline managers without resorting to takeover (Shleifer and Vishny (1986)). The sample contains a survivorship bias, because it includes only firms that remained on the market through 1989. This bias, however, lessens our chances of finding a relationship between poor performance and block purchases, given that many poorly performing firms were taken over during the 1980s and thus, are excluded from our sample. Likewise, a survivorship bias favors us finding that defensive mechanisms deter block purchases, because *ceteris paribus*, firms that survived the 1980s without being acquired are likely to have had more effective defensive mechanisms than firms that did not survive.

B. Definition of Shareholder Groups

We follow McConnell and Servaes (1990) in defining two primary groups of shareholders: blockholders and insider owners. McConnell and Servaes's (1990) classification of shareholder groups follows the Securities and Exchange Commission (SEC) filing procedures, which define a blockholder as any corporation or individual who owns a beneficial interest of 5 percent or more of a firm's outstanding shares. Insiders are defined as officers and directors of a firm and their families.

In Section I, we argued that owners of large blocks of stock are likely to increase firm value. However, not all blockholders as defined by the SEC can be expected to exert a disciplinary effect on managers. In particular, some existing blockholders such as founders, founding families, and family trusts can be expected to reflect insider interests. Family trusts, for example, have incentives to ensure continued employment in the firm for family members and adequate dividends to support beneficiaries' private consumption.¹¹ Therefore, when measuring insider ownership, we classify the ownership interests of insider blockholders with those of other insider owners as defined by the SEC.

C. Data Sources

Data on insider and outsider ownership structure were collected from Value Line and confirmed using the Wall Street Journal and 13D filings. Data on diversification were collected from TRINET Inc.'s Large Establishment Database, which was released in 1981, 1983, 1985, 1987, and 1989. Data on the presence of anti-takeover charter amendments, dual-class share structures, states of incorporation, and ESOPs were collected from Moody's Industrial Manual. We used information supplied by Karpoff and Malatesta (1989) to identify states that adopted second-generation anti-takeover laws. Financial information was obtained from COMPUSTAT.

D. Methods

We tested the hypotheses using pooled time-series cross-sectional logistic regressions. Data for each firm were collected for five two-year time periods consonant with the availability of TRINET data on diversification. These periods are 1980-81, 1982-83, 1984-85, 1986-87, and 1988-89. Details of the logit analyses of the determinants of block purchases are discussed in the following section.

III. Empirical Results

A. Sample Characteristics

Table I describes the firms in the sample during the 1980-89 period. The frequency of block purchases is measured using a dummy variable that equals one if an outsider bought at least 5 percent of a firm's outstanding common stock during a two-year period (and zero otherwise). Block purchases took place in approximately 6 percent of the firms in the sample in the 1982-83 and 1984-85 periods, and in 5.3 percent of firms in the 1986-87 period. In the 1988-89 period, block purchases took place in 10.2 percent of sample firms.

Table I also shows the average profit margin and return on assets (ROA) measured at the outset of each two-year period and the dividend-adjusted stock return for the two-year period.¹² Both profit margin and ROA declined slightly in the early 1980s and then increased. Stock returns fluctuated more, with an average 19 percent drop in 1985-87 and a gain of 57.4 percent between 1988 and 1989. These changes reflect the collapse of stock prices in 1987 and their subsequent recovery.

Diversification is measured using a Herfindahl concentration ratio of employees for all fourdigit lines of business of a firm for the years 1981, 1983, 1985, 1987, and 1989. This ratio (reported as a percentage) is lower for more diversified firms and higher for more focused firms. Table I shows that sample firms became slightly more diversified between 1981 and 1989, with the Herfindahl ratio falling from 28 percent in 1981 to 26.3 percent in 1989.

The dual-class dummy variable equals one if a firm had a dual-class stock structure at the outset of any two-year period (zero otherwise). In 1981, 4.5 percent of sample firms had dualclass stock. This percentage rose throughout most of the period analyzed; by 1989, 7.6 percent of sample firms had dual-class stock. The shark repellent dummy equals one if a firm had a shareholders' rights plan (zero otherwise). In our sample, 31.4 percent of firms had some type of shark repellent in 1981; by 1989, all firms had some type of shark repellent in their charter. The ESOP dummy equals one if a firm had an ESOP in place (zero otherwise). The data show an increase in ESOP adoption. In 1981, 3.4 percent of sample firms had an ESOP; by 1989, 9.5

percent of firms had adopted an ESOP. The state anti-takeover law dummy equals one if a firm is incorporated in a state with an anti-takeover law (zero otherwise). By 1989 most states had passed some type of anti-takeover legislation and nearly all firms in the sample were incorporated in one of these states. Only nine firms in the sample changed states of incorporation during the period. Of those nine firms, six changed from a state with no amendment to a state with antitakeover legislation.

Average insider ownership, which includes the holdings of officers and directors, their family members, founders, founding families, and founding family trusts, declined slightly over the period. In 1981 insiders held an average of 9.1 percent of outstanding shares, whereas in 1989 they held 6.9 percent. We define an insider holding dummy that equals one if insiders held 5 percent or more of a firm's outstanding shares in any period (zero otherwise).¹³ This dummy measures insider holdings large enough to motivate managers to maximize share value. The mean value of this dummy variable declined from about 4.6 percent in 1980-81 to about 4.1 percent in 1988-89. A dummy was also defined for large firms that equals one if a firm's sales were above the sample median, measured for all periods (zero otherwise). The data show that firms in the sample increased in size between 1981 and 1989; by 1989, 58.3 percent of the firms in the sample had constant dollar sales above the sample median.

B. Univariate Comparisons

Table II compares the characteristics of firms that experienced block purchases during 1981-89 with firms that did not. The table shows the medians of descriptive variables and the corresponding p-values from Wilcoxon tests of differences in distribution.

First, Table II shows statistically significant differences in median profitability, measured at the outset of each two-year period, between firms in which block purchases took place and other firms. Firms in which block purchases took place had a median profit margin of 3.4 percent, compared with a median profit margin of 5 percent in firms in which no block purchases took place. This represents an absolute difference in performance of 1.6 percent between the two groups of firms; the performance of firms that did not experience block purchases was 147 percent greater than the performance of firms that did. Similar results are found for ROA and stock return. The median ROA in firms experiencing block purchases was 4.4 percent, compared with a median ROA of 6.5 percent in firms with no block purchases -- an absolute difference in performance of 2.1 percent and a percentage difference of 148 percent. The median two-year dividend-adjusted stock returns were lower in firms experiencing block purchases; in these firms, median returns were 2.2 percent, compared with 4.9 percent in other firms. These findings are consistent with the hypothesis that outsider investors purchase blocks of stock with the intention of disciplining managers to improve firm performance.

There is no statistically significant difference in the median Herfindahl ratio of corporate focus between the two groups of firms. This suggests that blockholders of stock were indifferent to firms' diversification policies at the time that they invested. It also indicates that diversification policy was not an underlying cause of the differences in firm performance observed between firms experiencing block purchases and other firms.

With regard to defensive mechanisms, we find no statistically significant difference in the mean proportion of firms with dual-class stock structures between the two groups of firms. However, firms that experienced block purchases had a statistically significant higher mean incidence of shark repellents and ESOP adoptions and were more likely to be incorporated in a state with an anti-takeover amendment than were firms that did not experience a block purchase. Coupled with accounting performance that is lower in firms that experienced block purchases, this finding is consistent with the argument that managers of under-performing firms institute defensive mechanisms, as found by Comment and Schwert (1993).

Finally, median insider ownership, measured as a percentage of insider holdings to outstanding shares, does not differ between the groups. The mean insider ownership dummy for firms that experienced a block purchase, however, was significantly lower than that for other firms. Firms in which block purchases took place were also smaller, an indication that large firm size may deter such purchases.

C. Determinants of Block Purchases

Table III shows the results of the logit regressions predicting block purchases using measures of corporate performance, diversification, defensive measures, insider holdings, and firm size.¹⁴ The most important result is that block purchases are more likely to take place in firms with poor accounting performance, which is consistent with the findings of the univariate analyses presented in Table II. Model 1 shows that firms with lower profit margins at the outset of any two-year period were about six times more likely to experience a block purchase during that period than other firms (coefficient = -8.52, p-value < 5 percent).¹⁵ Model 2 is a lagged model that examines the effects of profits at the outset of the previous two-year period and changes in profits during the previous two-year period on the likelihood of a block purchase. The results of this regression also show that firms with low prior profitability and subsequent declines in profitability were more likely to experience block purchases.

Similar results are shown in Models 3 and 4, which measure profitability in terms of ROA. Model 3 shows that firms with low ROA at the outset of a two-year period were about three times more likely to be the target of a block purchase than other firms (coefficient = -4.42, p-value < 1 percent). Similarly, Model 4 shows that ROA at the outset of the prior two-year period, and change in ROA in the prior period, are also statistically significant and strongly negatively related to block purchases.

Overall, this evidence consistently shows that outside blockholders buy into firms with poor accounting performance. These results are obtained despite the presence of a survivorship bias that should overstate the average profitability of surviving firms during the 1980s. Moreover, because we analyze only surviving firms, the evidence indicates that blockholders frequently buy into under-performing firms without subsequently pursuing a takeover. This result is consistent with previous theory and evidence that blockholders play an important role in disciplining managers in under-performing firms (Shleifer and Vishny (1986), Holderness and Sheehan (1985), Mikkelson and Ruback (1991)). Model 5 shows no statistically significant relationship between firms' two-year dividendadjusted stock returns and the likelihood of block purchase. This finding is inconsistent with the evidence presented in Table II, that stock returns were significantly lower in firms experiencing block purchases.

None of the regression models indicate that diversification influences the likelihood of block purchase. This finding is consistent with the univariate analyses, which show that there is little difference in corporate focus between firms experiencing block purchases and other firms. Together, these results strongly support the conclusion that diversification policy did not motivate block purchases during the 1980s. This evidence appears to contradict the conclusions of several prior studies that diversification reduces firm value. For example, Comment and Jarrell (1993) find that refocusing increases firm value, whereas Lang and Stulz (1992) find a substantial discount in the market value of diversified firms during the 1980s. The results of the univariate analysis show that our findings are not due to a correlation between diversification and poor performance.

The regressions also provide no evidence that defensive mechanisms deter block purchases. None of the variables measuring dual-class stock, shark repellents, ESOPs or state anti-takeover laws are statistically significant in any of the regressions. Again, this result is obtained despite a survivorship bias that favors the survival of firms with effective defensive mechanisms. Our findings are inconsistent with the results of the univariate analyses presented in Table II, which indicate a strong correlation between block purchases and the adoption of defensive measures. They are consistent, however, with Comment and Schwert's (1993) findings that defensive measures are predicted by poor firm performance. One explanation is that the correlation shown in Table II loses its significance once we control for performance.

All five models show that insider ownership and large firm size deter block purchases. The coefficient of the insider dummy is about -0.50 in all five regressions, indicating that blockholders are two-thirds as likely to buy into firms with high insider share ownership. This evidence suggests that entrenched insiders may deter changes in partial corporate control, as well as

complete changes in corporate control, as suggested by Dann and DeAngelo (1988), Stulz (1988), and Denis (1990). The coefficient on the large firm dummy is about -0.70 in all five regressions, indicating that blockholders buy into large firms at less than half the rate that they do in other firms. Firm size appears to protect managers from the market for corporate control. This finding is consistent with Ambrose and Megginson (1992) and Comment and Schwert (1993), which show that takeovers are less frequent in large firms.

IV. Summary and Conclusion

This study presents evidence that outside blockholders play an important role in disciplining managers of public firms. We find that block purchases are more likely to take place in firms with poor accounting performance and that defensive measures are ineffective in deterring block purchases. These findings have important implications for corporate governance in the 1990s. In recent years, the market for hostile takeovers and buyouts has largely subsided, leaving the task of monitoring and controlling managers in many large public firms to activist shareholders. Therefore, factors that deter block purchases threaten this new environment of corporate control. Our findings provide some reassurance on this count. They suggest that blockholders serve the interests of shareholders by targeting under-performing firms, and that managers in such firms cannot prevent block purchases and their disciplinary consequences by adopting defensive mechanisms.

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Endnotes

¹ See, for example, Shleifer and Vishny (1986), Mikkelson and Ruback (1991), Holderness and Sheehan (1985), and Barclay and Holderness (1991).

² See Bhagat, Shleifer, and Vishny (1990), Comment and Jarrell (1993), and Lang and Stulz (1992).

³ The voting rights of so-called nonvoting shares in dual-class stock structures vary. Usually, nonvoting shares have some voting rights, but they are considerably restricted relative to the rights of voting shares.

⁴ Jarrell and Poulsen (1988) find an average one-day announcement return of -0.82 percent for a sample of 88 dual class recapitalizations between 1976 and 1987. In contrast, Partch (1987) finds no significant stock price effects when dual-class stock structures are announced.

⁵ Jarrell and Poulsen (1987) find an average announcement return of -1.25 percent for a sample of 649 anti-takeover charter amendments during the period 1980-85.

⁶ Ryngaert (1988) finds an average return of -0.34 percent for a sample of 283 poison pill announcements; Malatesta and Walkling (1988) find an average announcement return of -0.92 percent for a sample of 132 poison pills.

⁷ Comment and Schwert (1993) argue that poison pills are instituted by managers in anticipation of a takeover attempt. They find that the same factors that predict takeovers also predict the adoption of poison pills, and that poison pills are associated with increases in takeover premiums.
⁸ In a sample of 94 ESOPs formed between 1987 and 1989, Gordon and Pound (1990) find a two-day negative share price reaction of approximately -4 percent to ESOPs formed in the presence of takeover activity and a negative share price reaction of -4.6 percent to ESOPs that diluted the voting power of outside shareholders.

⁹ Second-generation state anti-takeover laws were enacted after the U.S. Supreme Court overturned "first-generation" anti-takeover legislation. Second-generation control share statutes in Indiana were upheld by the U.S. Supreme Court in 1987; an appellate court upheld Wisconsin's business combination statute in 1988. These laws usually include one or more of the following provisions: (i) control share provisions, which require that a target firm's shareholders preapprove acquisitions of voting rights above a certain level of ownership; (ii) fair price provisions, which regulate the back-end price in a two-tiered takeover bid involving large shareholders; and (iii) freeze-out laws, which prohibit a bidder from engaging in a business combination with a target firm for a specified period, unless so approved by the target firm's board (Karpoff and Malatesta (1989)).

¹⁰ Karpoff and Malatesta (1989) document an average two-day return of -0.29 percent for firms affected by the passage of state anti-takeover statutes. Szewczyk and Tsetsekos (1992) find average abnormal returns of -9.09 percent for firms affected by Pennsylvania's anti-takeover statute during the period that the statute was being legislated.

¹¹ Chandler (1990), among others, argues that founders and founding families may be more concerned with maintaining control of a business and its associated private income streams than with maximizing the value of the firm. Consistent with the conjecture that some blockholders represent the interests of insiders rather than shareholders at large, Slovin and Sushka (1993) find a two-day abnormal stock price reaction of 3.01 percent when the deaths of insider blockholders are announced.

¹² Profit margin is measured as the ratio of operating income before depreciation to sales. ROA is measured as the ratio of operating income before depreciation to assets.

¹³ In unreported analyses, we defined dummies for insider ownership ranging from 5 percent to 50 percent to distinguish between levels of insider ownership that might motivate managers and those that might entrench managers, consistent with the findings of Morck, Shleifer, and Vishny (1988) and McConnell and Servaes (1990). We did not find any differences in our results using different definitions of insider ownership. ¹⁴ In unreported analyses, we spit our sample into two time periods: 1981-1985 and 1986-1989. We ran logit regressions identical to those described on the two samples. We did not find any significant differences in results between the two samples.

¹⁵ Maddala (1983) shows that an equivalent ordinary least squares regression coefficient is approximately two-thirds the magnitude of a logit coefficient.

Table I Descriptive Statistics by Two-Year Period

Sample means of measures of blockholder purchases, performance, diversification, and defensive measures. The sample consists of 264 Fortune 500 firms in 1981 that survived as independent public firms through 1989. Block purchase frequency equals one if a shareholder bought at least 5 percent of a firm's outstanding common stock during the two-year period indicated (zero otherwise). Profit margin equals operating income/sales before depreciation. ROA equals operating income/assets before depreciation. Stock return is the dividend-adjusted twoyear stock return for each period indicated. The Herfindahl ratio is a measure of the focus of a firm's activities across business areas; it is the sum of the squared proportions of each four-digit line of business's share of total firm employees. The dual-class dummy equals one if a firm had dual-class stock at the outset of the two-year period indicated (zero otherwise). The shark repellent dummy equals one if a firm had an anti-takeover charter amendment, poison pill, or other type of shark repellent in place at the outset of the two-year period indicated (zero otherwise). The ESOP dummy equals one if a firm had an ESOP at the outset of the two-year period indicated (zero otherwise). The state anti-takeover statute dummy equals one if a firm was incorporated in a state with a second-generation takeover amendment at the outset of the two-year period indicated (zero otherwise). The insider percent is the fraction of shares held by a firm's officers, directors, founders, founding family members, or founding family trusts at the outset of the two-year period indicated. The insider holding dummy equals one if a firm's officers, directors, founders, founding family members, or founding family trusts held 5 percent or more of a firm's stock at the outset of the two-year period indicated (zero otherwise). The large firm dummy variable equals one if a firm's sales were larger than the pooled sample median firm sales for all five periods (zero otherwise).

Sample Means	1980-81	1982-83	1984-85	1986-87	1988-89
Block purchase frequency	0%	6.1%	6.1%	5.3%	10.2%
Profit margin	0.055	0.041	0.032	0.050	0.048
Return on assets (ROA)	0.071	0.053	0.042	0.055	0.053
Stock return	-0.068	0.252	0.047	-0.190	0.574
Herfindahl ratio of focus	28.0%	27.2%	27.4%	26.3%	26.3%
Dual-class dummy	4.5%	5.3%	6.1%	8.0%	7.6%
Shark repellent dummy	31.4%	31.4%	34.5%	76.9%	100%
ESOP dummy	3.4%	3.4%	4.2%	4.9%	9.5%
State anti-takeover statute dummy	0.0%	12.1%	29.9%	40.9%	94.3%
Insider ownership percent	9.1%	8.3%	7.7%	7.1%	6.9%
Insider dummy	48.9%	50.0%	46.2%	42.8%	41.3%
Large firm dummy	46.2%	47.3%	48.9%	54.9%	58.3%

Table II

Comparison of Firms Experiencing Block Purchases to Other Firms

Comparison of the median values of variables (mean values for dummy variables) for firms that did and did not experience block purchases between 1981 and 1989, and the corresponding Wilcoxon test statistics for differences in distribution. Block purchase frequency equals one if a shareholder bought at least 5 percent of a firm's outstanding common stock during the two-year period indicated (zero otherwise). Profit margin equals operating income/sales before depreciation. ROA equals operating income/assets before depreciation. Stock return is the dividend-adjusted two-year stock return for each period indicated. The Herfindahl ratio is a measure of the focus of a firm's activities across business areas; it is the sum of the squared proportions of each four-digit line of business's share of total firm employees. The dual-class dummy equals one if a firm had dual-class stock at the outset of the two-year period indicated (zero otherwise). The shark repellent dummy equals one if a firm had an anti-takeover charter amendment, poison pill, or other type of shark repellent in place at the outset of the two-year period indicated (zero otherwise). The ESOP dummy equals one if a firm had an ESOP at the outset of the two-year period indicated (zero otherwise). The state anti-takeover statute dummy equals one if a firm was incorporated in a state with a second-generation takeover amendment at the outset of the two-year period indicated (zero otherwise). The insider percent is the fraction of shares held by a firm's officers, directors, founders, founding family members, or founding family trusts at the outset of the two-year period indicated. The insider holding dummy equals one if a firm's officers, directors, founders, founding family members, or founding family trusts held 5 percent or more of a firm's stock at the outset of the two-year period indicated (zero otherwise). The large firm dummy variable equals one if a firm's sales were larger than the pooled sample median firm sales for all five periods (zero otherwise).

Variable	Block Purchase	No Block Purchase statistic	Wilcoxon test (p-value)
Profit margin	0.034	0.050	0.0001
Return on assets (ROA)	0.044	0.065	0.0001
Stock return	0.022	0.049	0.0400
Herfindahl ratio of focus	0.247	0.218	0.2900
Dual-class dummy	0.041	0.064	0.4308
Shark repellent dummy	0.685	0.541	0.0161
ESOP dummy	0.096	0.040	0.0200
State anti-takeover statute dummy	0.562	0.342	0.0001
Insider ownership percent	0.020	0.020	0.9089
Insider dummy	0.301	0.468	0.0056
Large firm dummy	0.343	0.503	0.0075

Table III

Logit Analysis of Blockholder Entry into *Fortune* 500 Firms that Remained Independent Between 1981 and 1989

The dependent variable equals one if a shareholder bought at least 5 percent of the firm's outstanding common stock in any two-year period sampled (zero otherwise). Block purchase frequency equals one if a shareholder bought at least 5 percent of a firm's outstanding common stock during the two-year period indicated (zero otherwise). Profit margin equals operating income/sales before depreciation. ROA equals operating income/assets before depreciation. Stock return is the dividend-adjusted two-year stock return for each period indicated. The Herfindahl ratio is a measure of the focus of a firm's activities across business areas; it is the sum of the squared proportions of each fourdigit line of business's share of total firm employees. The dual-class dummy equals one if a firm had dual-class stock at the outset of the two-year period indicated (zero otherwise). The shark repellent dummy equals one if a firm had an anti-takeover charter amendment, poison pill, or other type of shark repellent in place at the outset of the two-year period indicated (zero otherwise). The ESOP dummy equals one if a firm had an ESOP at the outset of the two-year period indicated (zero otherwise). The state anti-takeover statute dummy equals one if a firm was incorporated in a state with a second-generation takeover amendment at the outset of the two-year period indicated (zero otherwise). The insider percent is the fraction of shares held by a firm's officers, directors, founders, founding family members, or founding family trusts at the outset of the two-year period indicated. The insider holding dummy equals one if a firm's officers, directors, founders, founding family members, or founding family trusts held 5 percent or more of a firm's stock at the outset of the two-year period indicated (zero otherwise). The large firm dummy variable equals one if a firm's sales were larger than the pooled sample median firm sales for all five periods (zero otherwise).

Results are displayed on the following page.

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	3.69 (2.34)	2.10 (1.18)	-2.11 (44.6)***	2.05 (40.7)***	-2.31 (56.6)***
Profit margin at the beginning of the blockholder entry period	-8.52 (5.96)**	त २२ २. ज व			8 ₁
Profit margin 2 years prior to blockholder entry period		-6.21 (5.32)**			
Change in profit margin in the 2 years prior to blockholder entry		-2.16 (6.70)**			
ROA at the beginning of the blockholder entry period			-4.42 (7.67)***		
ROA 2 years prior to the blockholder entry period				-5.54 (9.04)***	
Change in ROA during the 2 year period prior to blockholder entry				-3.83 (5.55)**	14
Stock market return for 2 years prior to blockholder entry					-0.21 (1.35)
Herfindahl ratio of focus	0.49 (0.54)	0.38 (0.32)	0.40 (0.35)	0.39 (0.35)	0.40 (0.36)
Dual-class dummy	-0.46 (0.53)	-0.48 (0.57)	-0.45 (0.52)	-0.42 (0.46)	-0.57 (0.82)
Shark repellent dummy	0.28 (1.19)	0.27 (1.11)	0.29 (1.34)	0.26 (1.06)	0.27 (1.17)
ESOP dummy	0.19 (0.08)	0.21 (0.11)	0.16 (0.06)	0.13 (0.04)	0.26 (0.18)
State anti-takeover statute dummy	0.13 (0.20)	0.13 (0.19)	0.10 (0.12)	0.092 (0.09)	0.11 (0.14)
Insider dummy	-0.51 (3.67)*	-0.50 (3.54)*	-0.51 (3.77)*	-0.48 (3.26)*	-0.54 (4.33)**
Large firm dummy	-0.70 (6.65)***	-0.72 (7.11)***	-0.73 (7.37)***	-0.72 (7.06)***	-0.80 (8.84)***
Log-likelihood	-252.6	-255.3	-254.1	-253.5	-257.6
Model p-value	0.001	0.016	0.004	0.005	0.052

() indicates chi-square test of whether a coefficient is different from zero. The asterisks indicate:
* statistically significant at the 10% confidence level.
** statistically significant at the 5% confidence level.
*** statistically significant at the 1% confidence level.

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