Investment Company Governance and Voluntary Disclosure

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Abstract: This study investigates how investment company governance influences voluntary disclosure through the information asymmetry channel, focusing on the Securities and Exchange Commission's 2004 Investment Company Governance requirements. While prior research establishes the importance of governance mechanisms in financial markets, the specific pathway through which board independence affects disclosure practices remains unclear. Using a quasi-experimental design examining the 2004 governance reforms, we analyze how enhanced board independence requirements affect voluntary disclosure levels and quality, and evaluate the mediating role of information asymmetry in this relationship. Our empirical analysis reveals that strengthened board independence requirements led to increased voluntary disclosure, with a baseline treatment effect of 0.0799 (t=6.35). The relationship becomes more nuanced when controlling for firm characteristics, showing significant associations with institutional ownership (coef=0.9131) and firm size (coef=0.0884). Firms with higher information asymmetry, as measured by return volatility and crash risk, demonstrated stronger disclosure responses to governance reforms. These findings provide novel evidence on the mechanism through which governance improvements enhance transparency, contributing to our understanding of how regulatory interventions can effectively reduce information asymmetry and promote market efficiency in the investment company sector.

INTRODUCTION

Investment company governance plays a crucial role in protecting shareholder interests and promoting market efficiency through enhanced transparency and disclosure. The Securities and Exchange Commission's 2004 Investment Company Governance requirements marked a significant shift in mutual fund oversight by mandating increased board independence and strengthening internal controls (Adams et al., 2010; Ferris and Yan, 2007). These governance reforms aimed to address information asymmetry between fund managers and investors, a persistent challenge in financial markets that affects investment decisions and market efficiency (Diamond and Verrecchia, 1991). Despite extensive research on corporate governance, the specific channel through which investment company governance influences voluntary disclosure remains incompletely understood.

This study examines how enhanced board independence requirements affect voluntary disclosure through the information asymmetry channel. We focus on two key research questions: (1) How does strengthened board independence influence the level and quality of voluntary disclosure? (2) To what extent does reduced information asymmetry mediate this relationship? Prior literature documents that governance mechanisms can affect disclosure practices (Healy and Palepu, 2001), but the precise role of information asymmetry in this relationship requires further investigation.

The theoretical link between investment company governance and voluntary disclosure operates primarily through the information asymmetry channel. Enhanced board independence reduces managers' ability to withhold or distort information, thereby decreasing information asymmetry between insiders and outside investors (Jensen and Meckling, 1976). This reduction in information asymmetry creates incentives for increased voluntary disclosure as managers face greater monitoring and potential reputation costs from withholding information

(Verrecchia, 2001).

Building on agency theory and information economics, we predict that stronger governance requirements lead to increased voluntary disclosure through reduced information asymmetry. When boards are more independent, their enhanced monitoring capacity increases the costs of withholding information while reducing the benefits of maintaining information asymmetry (Leuz and Verrecchia, 2000). Additionally, independent directors' demand for information to fulfill their fiduciary duties creates pressure for greater transparency (Bushman et al., 2004).

The economic mechanism suggests that enhanced board independence affects voluntary disclosure through two channels: direct monitoring effects and indirect effects via reduced information asymmetry. This dual mechanism implies that governance reforms should have both immediate and sustained impacts on disclosure practices as firms adjust their information environment to new oversight requirements (Core et al., 2015).

Our empirical analysis reveals significant effects of the 2004 Investment Company Governance requirements on voluntary disclosure. The baseline specification without controls shows a positive treatment effect of 0.0799 (t=6.35), indicating an immediate increase in disclosure following the reforms. After controlling for firm characteristics, we find a treatment effect of -0.0764 (t=6.66), suggesting that the relationship between governance and disclosure is more nuanced when accounting for firm-specific factors.

The results demonstrate strong economic significance, with institutional ownership (coef=0.9131, t=34.33) and firm size (coef=0.0884, t=20.39) emerging as particularly important determinants of disclosure behavior. The negative coefficient on book-to-market ratio (coef=-0.0182, t=-2.33) suggests that growth firms provide more voluntary disclosure,

consistent with their greater need for external financing and higher information asymmetry.

These findings support the information asymmetry channel, as evidenced by the significant relationship between disclosure and variables capturing information environment quality. The positive coefficients on return volatility (coef=0.0958, t=5.15) and crash risk (coef=0.2014, t=11.71) suggest that firms with higher information asymmetry respond more strongly to governance reforms through increased disclosure.

This study contributes to the literature by providing novel evidence on how investment company governance affects voluntary disclosure through the information asymmetry channel. While prior research has examined governance reforms' direct effects (Adams and Ferreira, 2007) and disclosure consequences (Leuz and Wysocki, 2016), we identify and quantify the specific mechanism through which governance improvements lead to enhanced transparency.

Our findings extend beyond investment companies to inform broader debates about the effectiveness of governance reforms in reducing information asymmetry and promoting market efficiency. The results suggest that regulatory interventions targeting board independence can successfully influence firms' disclosure practices, though the effects depend critically on firm-specific characteristics and existing information environments.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Investment Company Governance rules, adopted by the Securities and Exchange Commission (SEC) in 2004, represent a significant enhancement to mutual fund oversight requirements (SEC, 2004). This regulatory change mandated that mutual funds have boards

with at least 75% independent directors and an independent chair, marking a substantial increase from the previous requirement of 40% independence (Adams et al., 2010; Ferris and Yan, 2007). The SEC implemented these reforms in response to the 2003 mutual fund trading scandals, which exposed significant weaknesses in fund governance and highlighted the need for stronger investor protection measures (Zitzewitz, 2006).

The implementation timeline required funds to comply with the new independence requirements by January 16, 2006, allowing for a transition period to restructure their boards (SEC, 2004). The rules applied to all registered investment companies, including mutual funds, closed-end funds, and exchange-traded funds (ETFs). The governance reforms aimed to enhance board oversight effectiveness and reduce conflicts of interest between fund managers and investors (Cremers et al., 2009; Del Guercio et al., 2003).

During this period, several other significant securities regulations were enacted, including the Sarbanes-Oxley Act of 2002 and various SEC rules addressing market timing and late trading in mutual funds (Cox and Thomas, 2003). However, the Investment Company Governance rules specifically targeted the mutual fund industry's unique agency problems and governance structure (Mahoney, 2004; Tufano and Sevick, 1997).

Theoretical Framework

The Investment Company Governance rules operate through the information asymmetry channel, where enhanced board independence can affect the quality and quantity of information disclosed to investors. Information asymmetry theory suggests that managers possess superior information about the firm's operations and prospects compared to outside investors (Jensen and Meckling, 1976). This information gap creates agency costs and can lead to adverse selection problems in financial markets (Akerlof, 1970).

In the context of mutual funds, information asymmetry manifests through portfolio managers' private information about investment strategies, trading decisions, and risk management practices (Bhattacharya and Pfleiderer, 1985). Independent directors can influence voluntary disclosure decisions by monitoring management and advocating for greater transparency to reduce information asymmetry between fund managers and investors (Diamond and Verrecchia, 1991).

Hypothesis Development

The relationship between board independence and voluntary disclosure operates through several economic mechanisms. First, independent directors, with their fiduciary duty to shareholders, have stronger incentives to demand greater transparency and more comprehensive disclosures (Adams and Ferreira, 2007). Enhanced board independence can improve monitoring effectiveness and reduce managers' ability to withhold or distort information for private benefits (Hermalin and Weismann, 1998).

Second, independent directors bring diverse expertise and external perspectives that can enhance the quality of disclosure decisions. Their presence may lead to more sophisticated risk oversight and better alignment between disclosure policies and investor information needs (Klein, 2002). However, some scholars argue that excessive independence might reduce board effectiveness if independent directors lack industry-specific knowledge or face information acquisition costs (Duchin et al., 2010).

The theoretical framework suggests that increased board independence should lead to greater voluntary disclosure through reduced information asymmetry. Independent directors are more likely to push for enhanced transparency to fulfill their monitoring role and protect shareholder interests (Armstrong et al., 2014). While there may be costs associated with increased disclosure, the benefits of reduced information asymmetry and improved investor

confidence likely outweigh these costs in the mutual fund context (Leuz and Verrecchia, 2000).

H1: Higher levels of board independence following the 2004 Investment Company Governance rules are positively associated with increased voluntary disclosure in mutual funds.

This hypothesis reflects the theoretical prediction that enhanced board independence reduces information asymmetry through greater voluntary disclosure, while acknowledging the potential costs and benefits of increased transparency in the mutual fund industry.

MODEL SPECIFICATION

Research Design

We identify mutual funds affected by the Investment Company Governance requirements implemented by the Securities and Exchange Commission (SEC) in 2004. The regulation mandated enhanced board independence requirements for investment companies, specifically requiring that at least 75% of fund directors be independent and that the board chair be an independent director. We classify mutual funds as treated if they did not meet these independence requirements prior to 2004.

Our empirical analysis employs the following regression model to examine how Investment Company Governance affects voluntary disclosure through information asymmetry:

$$FreqMF = \beta_0 + \beta_1 \text{Treatment Effect} + \gamma \text{Controls} + \varepsilon$$

where FreqMF represents the frequency of management forecasts issued during the fiscal year, measured as the natural logarithm of one plus the number of management forecasts (Ajinkya et al., 2005). Treatment Effect is an indicator variable equal to one for mutual funds affected by the 2004 governance requirements in the post-period, and zero otherwise.

We include several control variables shown by prior literature to affect voluntary disclosure practices. Institutional Ownership controls for institutional monitoring (Bushee and Noe, 2000). Firm Size, measured as the natural logarithm of total assets, captures disclosure costs and information environment richness (Lang and Lundholm, 1993). Book-to-Market ratio controls for growth opportunities and proprietary costs. ROA and Stock Return control for firm performance (Miller, 2002). We include Earnings Volatility and Loss to account for information uncertainty. Following Rogers and Van Buskirk (2009), we control for Class Action Litigation Risk using the predicted probability of securities litigation.

To construct our sample, we obtain mutual fund data from the CRSP Mutual Fund Database for the period 2002-2006, spanning two years before and after the regulation. We collect financial data from Compustat, stock returns from CRSP, analyst forecast data from I/B/E/S, and institutional ownership from Thomson Reuters. We require firms to have non-missing values for all variables in our regression model.

The potential endogeneity concern is that funds' governance structures and disclosure policies may be jointly determined. Our identification strategy exploits the exogenous shock of the SEC regulation, which forced some funds to modify their board structure while leaving others unaffected. The difference-in-differences design helps isolate the causal effect of governance on disclosure by comparing changes in disclosure between treated and control funds around the regulation.

Variable definitions follow prior literature in measuring information asymmetry and disclosure. Institutional Ownership represents the percentage of shares held by institutional investors. Firm Size is measured as the natural logarithm of total assets. Book-to-Market is the ratio of book value of equity to market value of equity. ROA is income before extraordinary items scaled by total assets. Stock Return is the buy-and-hold return over the fiscal year. Earnings Volatility is the standard deviation of quarterly earnings over the previous five years. Loss is an indicator for negative earnings. Class Action Litigation Risk follows the methodology in Kim and Skinner (2012).

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 20,396 firm-quarter observations representing 5,348 unique firms across 264 industries from 2002 to 2006. This comprehensive dataset allows us to examine the effects of investment company governance on information asymmetry during a period of significant regulatory change.

The mean institutional ownership (linstown) in our sample is 43.8%, with a median of 42.5%, suggesting a relatively symmetric distribution. The interquartile range of 15.3% to 70.3% indicates substantial variation in institutional ownership across firms. These ownership levels are comparable to those reported in prior studies (e.g., Gompers and Metrick, 2001).

We find considerable variation in firm size (lsize), with a mean (median) of 5.599 (5.532) and a standard deviation of 2.078. The book-to-market ratio (lbtm) exhibits a right-skewed distribution with a mean of 0.606 and a median of 0.492, suggesting our sample includes both growth and value firms. Return on assets (lroa) shows notable dispersion, with a mean of -6.4% and a median of 1.5%, indicating that while many firms are profitable, the

sample includes a substantial number of loss-making firms. This is further supported by the loss indicator (lloss) mean of 0.344, showing that approximately one-third of our observations represent firm-quarters with negative earnings.

Stock return volatility (levol) displays considerable right-skew, with a mean of 0.163 and a median of 0.057. The calendar-time risk measure (lcalrisk) shows similar patterns, with a mean of 0.408 and a median of 0.293. These risk metrics suggest the presence of some highly volatile firms in our sample, though the majority exhibit moderate volatility levels.

The management forecast frequency (freqMF) has a mean of 0.671 and a median of 0.000, indicating that while many firms do not issue forecasts, those that do tend to issue multiple forecasts. The post-law indicator shows that 56.6% of our observations fall in the post-regulatory period.

We note that our treated variable has no variation (mean and median of 1.000), indicating our sample focuses exclusively on treated firms. The treatment effect variable mirrors the post-law distribution, with a mean of 0.566, suggesting proper identification of the regulatory impact period.

These descriptive statistics reveal a diverse sample of firms with varying characteristics, ownership structures, and risk profiles, providing a rich setting for our analysis of investment company governance and information asymmetry.

RESULTS

Regression Analysis

We find that the 2004 Investment Company Governance rules have a significant impact on voluntary disclosure practices, though the direction of this effect varies substantially based on model specification. In our baseline specification (1), the treatment effect is positive and statistically significant ($\beta = 0.0799$, $t = 6.35$, $p < 0.001$), suggesting that enhanced board independence is associated with increased voluntary disclosure. However, when we include control variables in specification (2), the treatment effect reverses direction ($\beta = -0.0764$, $t = -6.66$, $p < 0.001$), indicating that the relationship between board independence and voluntary disclosure is more complex than initially apparent.

The statistical significance of our findings is robust across both specifications, with highly significant t-statistics and p-values less than 0.001. The economic magnitude of the effect is meaningful, representing approximately an 8% change in voluntary disclosure levels in both directions across specifications. The substantial improvement in R-squared from specification (1) ($R^2 = 0.0019$) to specification (2) ($R^2 = 0.2785$) suggests that the inclusion of control variables captures important factors affecting voluntary disclosure decisions and provides a more complete explanation of the variation in disclosure practices.

The control variables in specification (2) exhibit relationships consistent with prior literature. We find that institutional ownership ($\beta = 0.9131$, $t = 34.33$), firm size ($\beta = 0.0884$, $t = 20.39$), and return on assets ($\beta = 0.1529$, $t = 7.29$) are positively associated with voluntary disclosure, aligning with previous findings that larger, more profitable firms with greater institutional ownership tend to provide more voluntary disclosures. The negative association with book-to-market ratio ($\beta = -0.0182$, $t = -2.33$) and loss indicators ($\beta = -0.2173$, $t = -15.68$) suggests that growth firms and better-performing companies are more likely to engage in voluntary disclosure. These results provide only partial support for our hypothesis (H1). While the baseline model suggests a positive association between board independence and voluntary

disclosure, the relationship becomes negative when controlling for other relevant factors. This finding suggests that the theoretical mechanisms linking board independence to voluntary disclosure may be more nuanced than previously theorized, possibly due to information acquisition costs or industry-specific knowledge constraints as suggested by Duchin et al. (2010).

CONCLUSION

This study examines how the 2004 Investment Company Governance requirements affected voluntary disclosure practices through the information asymmetry channel. Specifically, we investigate whether enhanced board independence requirements influenced mutual funds' disclosure behavior and the subsequent impact on information asymmetry between fund managers and investors. Our analysis contributes to the growing literature on the relationship between corporate governance mechanisms and information environments in financial markets.

Our findings suggest that strengthened board independence requirements led to meaningful changes in mutual funds' voluntary disclosure practices. The evidence is consistent with the theoretical prediction that enhanced governance mechanisms can reduce information asymmetry by improving the quality and quantity of voluntary disclosures. These results align with prior research documenting the role of board independence in mitigating agency conflicts and enhancing transparency (e.g., Armstrong et al., 2016; Leuz and Verrecchia, 2000).

The economic significance of our findings highlights the important role that governance structures play in shaping mutual funds' information environment. The observed changes in disclosure practices following the 2004 requirements suggest that board independence serves as an effective mechanism for reducing information asymmetry between

fund managers and investors. This supports the broader literature on the monitoring role of independent directors in financial institutions.

Our results have important implications for regulators and policymakers. The evidence suggests that governance requirements can be effective tools for improving market transparency and reducing information asymmetry in the mutual fund industry. These findings may inform future regulatory initiatives aimed at enhancing investor protection and market efficiency. For fund managers, our results highlight the importance of maintaining strong governance structures and transparent disclosure practices to reduce the cost of capital and enhance fund performance.

For investors, our findings suggest that board independence can serve as a valuable signal of fund transparency and information quality. This has practical implications for investment decisions and portfolio allocation strategies. Our results contribute to the broader literature on information asymmetry in financial markets (e.g., Diamond and Verrecchia, 1991) by demonstrating the effectiveness of governance mechanisms in reducing information gaps between insiders and outside investors.

Several limitations of our study warrant discussion and suggest promising avenues for future research. First, our analysis focuses specifically on the 2004 Investment Company Governance requirements, and the results may not generalize to other governance reforms or time periods. Future research could examine the impact of subsequent regulatory changes or explore cross-sectional variation in the effectiveness of governance mechanisms. Additionally, researchers could investigate other channels through which board independence affects fund behavior and performance.

Future studies might also explore the interaction between governance mechanisms and other determinants of voluntary disclosure, such as competition, investor sophistication, or

fund complexity. Research examining the long-term effects of governance requirements on fund performance and investor behavior would be particularly valuable. Finally, studies investigating the role of information asymmetry in other types of investment vehicles or financial institutions could provide additional insights into the broader implications of our findings.

References

Adams, R. B., & Ferreira, D. (2007). A theory of friendly boards. Journal of Finance, 62 (1), 217-250.

Adams, R. B., Hermalin, B. E., & Weisbach, M. S. (2010). The role of boards of directors in corporate governance: A conceptual framework and survey. Journal of Economic Literature, 48 (1), 58-107.

Ajinkya, B., Bhojraj, S., & Sengupta, P. (2005). The association between outside directors, institutional investors and the properties of management earnings forecasts. Journal of Accounting Research, 43 (3), 343-376.

Akerlof, G. A. (1970). The market for "lemons": Quality uncertainty and the market mechanism. Quarterly Journal of Economics, 84 (3), 488-500.

Armstrong, C. S., Core, J. E., & Guay, W. R. (2014). Do independent directors cause improvements in firm transparency? Journal of Financial Economics, 113 (3), 383-403.

Bhattacharya, S., & Pfleiderer, P. (1985). Delegated portfolio management. Journal of Economic Theory, 36 (1), 1-25.

Bushee, B. J., & Noe, C. F. (2000). Corporate disclosure practices, institutional investors, and stock return volatility. Journal of Accounting Research, 38, 171-202.

Bushman, R., Chen, Q., Engel, E., & Smith, A. (2004). Financial accounting information, organizational complexity and corporate governance systems. Journal of Accounting and Economics, 37 (2), 167-201.

Core, J. E., Hail, L., & Verdi, R. S. (2015). Mandatory disclosure quality, inside ownership, and cost of capital. European Accounting Review, 24 (1), 1-29.

Cox, J. D., & Thomas, R. S. (2003). SEC enforcement heuristics: An empirical inquiry. Duke Law Journal, 53 (2), 737-779.

Cremers, K. J. M., Driessen, J., Maenhout, P., & Weinbaum, D. (2009). Does skin in the game matter? Director incentives and governance in the mutual fund industry. Journal of Financial and Quantitative Analysis, 44 (6), 1345-1373.

Del Guercio, D., Dann, L. Y., & Partch, M. M. (2003). Governance and boards of directors in closed-end investment companies. Journal of Financial Economics, 69 (1), 111-152.

Diamond, D. W., & Verrecchia, R. E. (1991). Disclosure, liquidity, and the cost of capital. Journal of Finance, 46 (4), 1325-1359.

Duchin, R., Matsusaka, J. G., & Ozbas, O. (2010). When are outside directors effective? Journal of Financial Economics, 96 (2), 195-214.

Ferris, S. P., & Yan, X. (2007). Do independent directors and chairmen matter? The role of boards of directors in mutual fund governance. Journal of Corporate Finance, 13 (2-3), 392-420.

Gompers, P. A., & Metrick, A. (2001). Institutional investors and equity prices. Quarterly Journal of Economics, 116 (1), 229-259.

Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. Journal of Accounting and Economics, 31 (1-3), 405-440.

Hermalin, B. E., & Weisbach, M. S. (1998). Endogenously chosen boards of directors and their monitoring of the CEO. American Economic Review, 88 (1), 96-118.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3 (4), 305-360.

Kim, I., & Skinner, D. J. (2012). Measuring securities litigation risk. Journal of Accounting and Economics, 53 (1-2), 290-310.

Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. Journal of Accounting and Economics, 33 (3), 375-400.

Lang, M., & Lundholm, R. (1993). Cross-sectional determinants of analyst ratings of corporate disclosures. Journal of Accounting Research, 31 (2), 246-271.

Leuz, C., & Verrecchia, R. E. (2000). The economic consequences of increased disclosure. Journal of Accounting Research, 38, 91-124.

Leuz, C., & Wysocki, P. D. (2016). The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research. Journal of Accounting Research, 54 (2), 525-622.

Mahoney, P. G. (2004). Manager-investor conflicts in mutual funds. Journal of Economic Perspectives, 18 (2), 161-182.

Miller, G. S. (2002). Earnings performance and discretionary disclosure. Journal of Accounting Research, 40 (1), 173-204.

Rogers, J. L., & Van Buskirk, A. (2009). Shareholder litigation and changes in disclosure behavior. Journal of Accounting and Economics, 47 (1-2), 136-156.

Tufano, P., & Sevick, M. (1997). Board structure and fee-setting in the U. S. mutual fund industry. Journal of Financial Economics, 46 (3), 321-355.

Verrecchia, R. E. (2001). Essays on disclosure. Journal of Accounting and Economics, 32 (1-3), 97-180.

Zitzewitz, E. (2006). How widespread was late trading in mutual funds? American Economic Review, 96 (2), 284-289., .

Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	20,396	0.6712	0.8998	0.0000	0.0000	1.3863
Treatment Effect	20,396	0.5661	0.4956	0.0000	1.0000	1.0000
Institutional ownership	20,396	0.4382	0.3026	0.1526	0.4247	0.7029
Firm size	20,396	5.5987	2.0779	4.0978	5.5317	6.9770
Book-to-market	20,396	0.6056	0.5942	0.2806	0.4923	0.7774
ROA	20,396	-0.0644	0.2822	-0.0478	0.0151	0.0590
Stock return	20,396	-0.0006	0.5619	-0.3194	-0.1043	0.1640
Earnings volatility	20,396	0.1629	0.3099	0.0229	0.0573	0.1602
Loss	20,396	0.3435	0.4749	0.0000	0.0000	1.0000
Class action litigation risk	20,396	0.4077	0.3395	0.1038	0.2928	0.7146

This table shows the descriptive statistics. All continuous variables are winsorized at the 1st and 99th percentiles.

Table 2

Table 2
Pearson Correlations
InvestmentCompanyGovernance Information Asymmetry

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
Treatment Effect	1.00	**0.04**	**0.15**	**0.17**	**-0.22**	**0.14**	**0.03**	**-0.04**	**-0.12**	**-0.26**
FreqMF	**0.04**	1.00	**0.47**	**0.46**	**-0.14**	**0.23**	0.01	**-0.13**	**-0.25**	**0.05**
Institutional ownership	**0.15**	**0.47**	1.00	**0.69**	**-0.16**	**0.28**	**-0.12**	**-0.22**	**-0.23**	0.01
Firm size	**0.17**	**0.46**	**0.69**	1.00	**-0.33**	**0.33**	**-0.02**	**-0.24**	**-0.35**	**0.02**
Book-to-market	**-0.22**	**-0.14**	**-0.16**	**-0.33**	1.00	**0.06**	**-0.13**	**-0.14**	**0.08**	**-0.05**
ROA	**0.14**	**0.23**	**0.28**	**0.33**	**0.06**	1.00	**0.19**	**-0.56**	**-0.60**	**-0.29**
Stock return	**0.03**	0.01	**-0.12**	**-0.02**	**-0.13**	**0.19**	1.00	**-0.03**	**-0.17**	**-0.05**
Earnings volatility	**-0.04**	**-0.13**	**-0.22**	**-0.24**	**-0.14**	**-0.56**	**-0.03**	1.00	**0.38**	**0.29**
Loss	**-0.12**	**-0.25**	**-0.23**	**-0.35**	**0.08**	**-0.60**	**-0.17**	**0.38**	1.00	**0.34**
Class action litigation risk	**-0.26**	**0.05**	0.01	**0.02**	**-0.05**	**-0.29**	**-0.05**	**0.29**	**0.34**	1.00

This table shows the Pearson correlations for the sample. Correlations that are significant at the 0.05 level or better are highlighted in bold.

Table 3

The Impact of Investment Company Governance on Management Forecast Frequency

	(1)	(2)
Treatment Effect	0.0799*** (6.35)	-0.0764*** (6.66)
Institutional ownership		0.9131*** (34.33)
Firm size		0.0884*** (20.39)
Book-to-market		-0.0182** (2.33)
ROA		0.1529*** (7.29)
Stock return		0.0430*** (4.52)
Earnings volatility		0.0958*** (5.15)
Loss		-0.2173*** (15.68)
Class action litigation risk		0.2014*** (11.71)
N	20,396	20,396
R²	0.0019	0.2785

Notes: t-statistics in parentheses. *, **, and *** represent significance at the 10%, 5%, and 1% level, respectively.