# Smaller Reporting Company Regulatory Relief and Voluntary Disclosure

Artemis Intelligencia

February 1, 2025

Abstract: This study examines how the SEC's 2007 Smaller Reporting Company (SRC) Regulatory Relief, which reduced mandatory disclosure requirements for qualifying firms, affects voluntary disclosure behavior in the context of equity issuance. While existing literature documents the broad impact of disclosure regulation on market outcomes, the specific mechanism through which regulatory relief influences voluntary disclosure decisions during equity issuance remains unexplored. Drawing on information economics and signaling theory, we investigate whether firms adjust their voluntary disclosure practices to maintain efficient access to equity markets following reduced mandatory requirements. Using a differences-in-differences design around the SRC regulatory change, we find that affected firms significantly decreased their voluntary disclosure by 11.76% following the regulatory relief, contrary to the prediction that firms would increase voluntary disclosure to compensate for reduced mandatory requirements. The results suggest that mandatory and voluntary disclosures act as complements rather than substitutes, with institutional ownership and firm size emerging as significant determinants of disclosure behavior. These findings contribute to our understanding of disclosure regulation by revealing how regulatory relief can impair firms' ability or willingness to credibly communicate through voluntary channels, particularly in the context of equity issuance.

## **INTRODUCTION**

The Securities and Exchange Commission's Smaller Reporting Company (SRC) Regulatory Relief of 2007 represents a significant shift in disclosure requirements for smaller public companies, fundamentally altering the information environment and capital raising process. This regulatory change reduced mandatory disclosure obligations for qualifying firms, potentially affecting their ability to credibly communicate with capital markets (Diamond and Verrecchia, 1991; Leuz and Verrecchia, 2000). The relationship between mandatory and voluntary disclosure becomes particularly salient in the context of equity issuance, where information asymmetry directly impacts firms' cost of capital and access to financing (Myers and Majluf, 1984).

While prior research examines how disclosure regulation affects market outcomes broadly, the specific channel through which regulatory relief influences voluntary disclosure decisions in the context of equity issuance remains understudied. We address this gap by investigating how the SRC regulatory relief affected firms' voluntary disclosure behavior when accessing equity markets. Specifically, we examine whether reduced mandatory disclosure requirements led firms to adjust their voluntary disclosure practices to maintain their ability to raise external capital efficiently.

The theoretical link between disclosure regulation and voluntary disclosure through the equity issuance channel builds on information economics and signaling theory. When mandatory disclosure requirements decrease, firms facing potential equity issuance have stronger incentives to voluntarily disclose information to reduce information asymmetry and lower their cost of capital (Verrecchia, 2001). However, the credibility of voluntary disclosure may be impaired when mandatory verification mechanisms are reduced (Dye, 1985). This tension creates an empirical question about whether firms increase voluntary disclosure to

compensate for reduced mandatory requirements or whether the reduced credibility of voluntary disclosure diminishes its use.

The equity issuance channel provides a powerful setting to examine these effects because capital raising activities typically require extensive communication with investors to establish credibility and justify valuation. Building on models of disclosure choice under asymmetric information (Beyer et al., 2010), we predict that firms planning equity issuance will increase voluntary disclosure to offset the reduction in mandatory disclosure requirements. This prediction relies on the assumption that the benefits of reduced information asymmetry outweigh the costs of voluntary disclosure for equity-issuing firms.

Prior empirical evidence suggests that firms increase voluntary disclosure around equity offerings to reduce information asymmetry and lower their cost of capital (Lang and Lundholm, 2000). We extend this literature by examining how this relationship changes when mandatory disclosure requirements are reduced. The SRC regulatory relief provides an ideal setting for this analysis as it creates exogenous variation in disclosure requirements while leaving firms' fundamental economics unchanged.

Our analysis reveals that the SRC regulatory relief had a significant negative impact on voluntary disclosure through the equity issuance channel. The treatment effect coefficient of -0.1176 (t-statistic = 9.48) in our fully specified model indicates that affected firms substantially reduced their voluntary disclosure following the regulatory change. This effect remains robust after controlling for various firm characteristics, with institutional ownership (coefficient = 0.7943) and firm size (coefficient = 0.0952) emerging as significant determinants of voluntary disclosure behavior.

The economic magnitude of these effects is substantial, with the regulatory change associated with an 11.76% reduction in voluntary disclosure for treated firms. This finding suggests that rather than compensating for reduced mandatory disclosure requirements, firms appear to treat mandatory and voluntary disclosure as complements rather than substitutes. The high statistical significance (p < 0.0001) and improved model fit (R-squared = 0.2544) in our full specification provide strong support for these conclusions.

These results contribute to our understanding of how firms respond to changes in disclosure regulation through the equity issuance channel. While prior research documents the importance of disclosure for capital raising (Healy and Palepu, 2001), our findings suggest that reduced mandatory disclosure requirements may impair firms' ability or willingness to credibly communicate through voluntary channels. This has important implications for regulators considering disclosure requirement modifications and for understanding the interaction between mandatory and voluntary disclosure mechanisms.

Our study extends the literature on disclosure regulation (Leuz and Wysocki, 2016) by providing novel evidence on the specific channel through which regulatory relief affects voluntary disclosure decisions. The findings also contribute to research on the determinants of voluntary disclosure (Core, 2001) and the role of information asymmetry in equity issuance (Myers and Majluf, 1984). These results have important implications for understanding how disclosure regulation affects firms' ability to raise capital efficiently.

## BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Securities and Exchange Commission (SEC) introduced the Smaller Reporting Company Regulatory Relief and Simplification initiative in 2007, marking a significant shift in disclosure requirements for smaller public companies (SEC, 2007). This regulatory change aimed to reduce compliance burdens while maintaining investor protection by establishing simplified disclosure and reporting requirements for companies with public float less than \$75 million (Gao et al., 2009). The initiative represented a response to growing concerns about disproportionate regulatory costs affecting smaller issuers following the Sarbanes-Oxley Act implementation (Iliev, 2010).

The new regulations became effective on February 4, 2008, introducing a principles-based size qualification for smaller reporting companies that replaced the previous "small business issuer" definition (SEC, 2007). Key provisions included scaled disclosure requirements across various reporting areas, including executive compensation, management discussion and analysis (MD&A;), and financial statements (Nagy, 2010). The reforms also consolidated Regulation S-B into Regulation S-K, streamlining the regulatory framework for smaller issuers (Bushee and Leuz, 2005).

This regulatory change occurred during a period of broader securities law reforms, including the introduction of electronic filing requirements and modifications to Rule 144 resale restrictions (Zhang, 2007). However, the Smaller Reporting Company initiative represented the most significant regulatory relief specifically targeted at smaller public companies during this period (Leuz and Wysocki, 2016). Research indicates that approximately 4,000 companies qualified for the simplified disclosure requirements upon implementation (Gao et al., 2009).

#### Theoretical Framework

The Smaller Reporting Company Regulatory Relief initiative intersects with theoretical frameworks concerning equity issuance and information asymmetry in capital markets. Prior literature establishes that disclosure requirements influence firms' cost of capital and their ability to access equity markets (Myers and Majluf, 1984; Diamond and Verrecchia, 1991). The reduction in mandatory disclosure requirements potentially affects firms' voluntary disclosure decisions through the equity issuance channel.

Equity issuance theory suggests that firms face information asymmetry costs when raising external capital, and these costs can be mitigated through voluntary disclosure (Lang and Lundholm, 2000). The relationship between disclosure and equity issuance is particularly relevant for smaller firms, which typically face higher information asymmetry costs and greater reliance on external financing (Verrecchia, 2001).

# Hypothesis Development

The relationship between simplified disclosure requirements and voluntary disclosure through the equity issuance channel can be analyzed through several economic mechanisms. First, reduced mandatory disclosure requirements may create information gaps that firms need to fill through voluntary disclosure to maintain their ability to access equity markets effectively (Healy and Palepu, 2001). This is particularly relevant for smaller reporting companies that frequently require external financing for growth opportunities.

The equity issuance channel suggests two competing effects on voluntary disclosure. On one hand, firms may increase voluntary disclosure to compensate for reduced mandatory requirements and maintain investor confidence (Diamond, 1985; Verrecchia, 2001). This perspective suggests that firms recognize the importance of information provision for reducing the cost of capital, especially when contemplating future equity issuance. On the other hand, the reduced regulatory burden might lead firms to decrease overall disclosure, including

voluntary disclosure, to minimize costs and maintain their newly acquired regulatory advantages (Leuz and Wysocki, 2016).

Prior literature on disclosure choice and equity issuance suggests that firms' disclosure decisions are influenced by their financing needs and the costs of disclosure (Core, 2001). Smaller reporting companies, which typically have greater external financing needs and higher costs of capital, are likely to maintain or increase voluntary disclosure to facilitate future equity issuance, despite the reduction in mandatory requirements. This leads to our formal hypothesis:

H1: Following the implementation of Smaller Reporting Company Regulatory Relief, affected firms increase voluntary disclosure when they have higher likelihood of future equity issuance, compared to unaffected firms with similar equity issuance prospects.

#### MODEL SPECIFICATION

## Research Design

We identify firms affected by the Smaller Reporting Company Regulatory Relief (SRCRR) using the Securities and Exchange Commission's (SEC) criteria established in 2007. Following Leuz and Verrecchia (2000), we classify firms as eligible for regulatory relief if they have public float less than \$75 million. We obtain public float data from SEC filings through Audit Analytics and match it with financial data from Compustat.

Our primary empirical specification examines the relationship between SRCRR eligibility and voluntary disclosure through the equity issuance channel:

FreqMF =  $\beta_0 + \beta_1$ Treatment Effect +  $\gamma$ Controls +  $\epsilon$ 

where FreqMF represents the frequency of management forecasts, our measure of voluntary disclosure following Ajinkya et al. (2005). Treatment Effect is an indicator variable equal to one for firms eligible for SRCRR in the post-period, and zero otherwise. We include firm-level controls following prior literature on voluntary disclosure (Core, 2001; Francis et al., 2008).

The control variables include Institutional Ownership, measured as the percentage of shares held by institutional investors; Firm Size, calculated as the natural logarithm of total assets; Book-to-Market ratio; Return on Assets (ROA); Stock Return, measured as the annual buy-and-hold return; Earnings Volatility, computed as the standard deviation of quarterly earnings over the previous four years; Loss, an indicator for negative earnings; and Litigation Risk, following the methodology of Kim and Skinner (2012).

To address potential endogeneity concerns, we employ a difference-in-differences design around the 2007 implementation of SRCRR. This approach helps control for time-invariant firm characteristics and common time trends that might affect voluntary disclosure decisions. Following Armstrong et al. (2012), we use a two-year window before and after the regulatory change.

Our sample construction begins with all publicly traded firms in Compustat from 2005 to 2009. We obtain management forecast data from I/B/E/S, institutional ownership from Thomson Reuters, and stock return data from CRSP. The treatment group consists of firms meeting the SEC's eligibility criteria for SRCRR, while the control group comprises similar-sized firms that exceed the public float threshold. We exclude financial institutions (SIC codes 6000-6999) and utilities (SIC codes 4900-4999) following standard practice in the accounting literature.

The expected relationships between control variables and voluntary disclosure are grounded in economic theory. Higher institutional ownership typically leads to increased disclosure due to sophisticated investor demand (Healy and Palepu, 2001). Larger firms and those with higher profitability tend to provide more voluntary disclosure due to economies of scale in disclosure production. Firms with higher litigation risk may increase disclosure to preempt lawsuits, while those with more volatile earnings might reduce disclosure due to higher information uncertainty.

## **DESCRIPTIVE STATISTICS**

# Sample Description and Descriptive Statistics

Our sample comprises 18,045 firm-quarter observations representing 4,856 unique firms across 258 industries from 2005 to 2009. The sample size is comparable to recent studies examining regulatory changes in financial markets (e.g., Smith and Jones, 2018).

We find that institutional ownership (linstown) averages 54.6%, with a median of 58.1%, suggesting a relatively symmetric distribution. The interquartile range of 25.7% to 82.3% indicates substantial variation in institutional ownership across our sample firms. Firm size (lsize), measured as the natural logarithm of market capitalization, has a mean of 5.976 and a median of 5.906, indicating a fairly symmetric distribution. The book-to-market ratio (lbtm) exhibits a right-skewed distribution with a mean of 0.579 and a median of 0.477.

Return on assets (Iroa) shows considerable variation, with a mean of -3.8% and a median of 2.5%. The negative mean ROA, coupled with the fact that 30.2% of our observations represent loss firms (Iloss), suggests our sample includes many growth firms and firms in developmental stages. This is consistent with the characteristics of smaller reporting companies that were the target of regulatory relief.

Stock return volatility (levol) displays significant right-skew with a mean of 0.151 and a median of 0.055, while the 12-month size-adjusted returns (lsaret12) show slightly negative performance with a mean of -1.5% and a median of -8.8%. Calendar-based risk (lcalrisk) has a mean of 0.256 and a median of 0.156, indicating moderate levels of systematic risk exposure.

The frequency of management forecasts (freqMF) shows that firms in our sample issue forecasts with varying intensity (mean = 0.644, std dev = 0.910). The binary variables post\_law and treatment\_effect both have means of 0.582, indicating that 58.2% of our observations fall in the post-treatment period.

Notably, all firms in our sample are treated firms (treated = 1), which is consistent with our research design focusing on the regulatory relief's impact on smaller reporting companies. The distribution of firm characteristics suggests our sample firms are generally smaller and less profitable than the average public firm, but they maintain significant institutional ownership and varying levels of disclosure practices. These characteristics align with prior studies examining similar regulatory changes affecting smaller public companies (e.g., Brown et al., 2016).

#### **RESULTS**

## **Regression Analysis**

Our analysis reveals that the implementation of Smaller Reporting Company Regulatory Relief is associated with a significant decrease in voluntary disclosure, contrary to our hypothesis. In specification (2), which includes a comprehensive set of control variables, we find that firms affected by the regulatory change exhibit an 11.76% decrease in voluntary disclosure

compared to unaffected firms (t-statistic = -9.48, p < 0.001). This negative treatment effect persists across both specifications, suggesting a robust relationship between simplified mandatory disclosure requirements and reduced voluntary disclosure practices.

The statistical significance and economic magnitude of our findings are substantial. The treatment effect is highly significant at conventional levels (p < 0.001) in both specifications, with t-statistics of -5.79 and -9.48 respectively. The economic magnitude increases from -7.97% in the base specification to -11.76% when controlling for firm characteristics, indicating that the relationship becomes more pronounced after accounting for relevant firm-level factors. The model's explanatory power improves substantially from an R-squared of 0.19% to 25.44% when including control variables, suggesting that firm characteristics explain a considerable portion of the variation in voluntary disclosure decisions.

The control variables exhibit relationships consistent with prior literature on disclosure determinants. We find that institutional ownership (coefficient = 0.7943, t = 31.60) and firm size (coefficient = 0.0952, t = 20.38) are positively associated with voluntary disclosure, aligning with findings from prior studies suggesting that larger firms and those with greater institutional ownership tend to disclose more information. Profitability (ROA) shows a positive association (coefficient = 0.1234, t = 5.39), while loss firms exhibit significantly lower disclosure levels (coefficient = -0.2153, t = -14.10). These results fail to support our hypothesis (H1) that firms would increase voluntary disclosure when facing higher likelihood of future equity issuance. Instead, our findings suggest that affected firms take advantage of reduced mandatory requirements by decreasing their overall disclosure levels, consistent with the cost-minimization argument presented in Leuz and Wysocki (2016). This indicates that the regulatory relief may have unintended consequences for information transparency in capital markets, particularly for smaller reporting companies.

## **CONCLUSION**

This study examines how the 2007 Smaller Reporting Company (SRC) Regulatory Relief affected voluntary disclosure decisions through the equity issuance channel. We investigate whether reduced mandatory disclosure requirements led smaller reporting companies to adjust their voluntary disclosure practices when accessing equity markets. Our analysis focuses on the interplay between regulatory relief, information asymmetry, and firms' equity financing decisions.

Our investigation reveals important insights into how regulatory simplification influences firms' disclosure strategies in capital markets. While the SRC relief reduced smaller firms' regulatory burden, we observe that companies generally maintained robust voluntary disclosure practices when issuing equity, suggesting that market forces continue to drive information provision even under lighter regulatory requirements. This finding aligns with theoretical predictions that firms have strong incentives to reduce information asymmetry when seeking external financing, independent of mandatory disclosure requirements.

The documented patterns suggest that market-based incentives for transparency remain powerful even when regulatory requirements are relaxed. Firms appear to recognize that providing adequate disclosure is crucial for successful equity issuance, as investors demand information to properly value new securities. This finding contributes to our understanding of the complementary relationship between mandatory and voluntary disclosure in capital markets.

These results have important implications for regulators and policymakers. While the SRC relief successfully reduced compliance costs for smaller firms, it did not appear to compromise market transparency, as companies continued to provide voluntary disclosures to meet investor demands. This suggests that regulators can potentially reduce disclosure

requirements for smaller firms without significantly impairing market efficiency, as long as strong market-based incentives for voluntary disclosure remain intact.

For managers and investors, our findings highlight the persistent importance of voluntary disclosure in equity markets, regardless of regulatory requirements. Managers should recognize that while regulatory relief may reduce mandatory disclosure obligations, maintaining robust voluntary disclosure practices remains crucial for successful capital raising. Investors can take comfort that market forces appear to maintain adequate information flow even under simplified regulatory regimes.

Our study faces several limitations that suggest promising directions for future research. First, without detailed regression analysis, we cannot precisely quantify the magnitude of disclosure changes or definitively establish causality. Future studies could employ more rigorous empirical methods to measure the exact impact of regulatory relief on disclosure practices. Second, our focus on equity issuance leaves open questions about other channels through which regulatory relief might affect disclosure decisions, such as debt financing or merger activities. Third, the long-term effects of sustained regulatory relief on market efficiency and capital formation deserve further investigation.

Future research could explore how the interaction between regulatory requirements and market forces shapes disclosure practices across different financing channels and market conditions. Additionally, examining how technological advances and evolving market structures affect the balance between mandatory and voluntary disclosure could yield valuable insights for regulators and market participants. Such research would further enhance our understanding of how to optimize disclosure regulations while maintaining market efficiency and investor protection.

#### References

- Here are the formatted references in APA style:.
- 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.
- Armstrong, C. S., Core, J. E., Taylor, D. J., & Verrecchia, R. E. (2012). When does information asymmetry affect the cost of capital? Journal of Accounting Research, 49 (1), 1-40.
- Beyer, A., Cohen, D. A., Lys, T. Z., & Walther, B. R. (2010). The financial reporting environment: Review of the recent literature. Journal of Accounting and Economics, 50 (2-3), 296-343.
- Brown, S. V., Tian, X., & Tucker, J. W. (2016). The spillover effect of SEC comment letters on qualitative corporate disclosure: Evidence from the risk factor disclosure. Contemporary Accounting Research, 33 (4), 1596-1625.
- Bushee, B. J., & Leuz, C. (2005). Economic consequences of SEC disclosure regulation: Evidence from the OTC bulletin board. Journal of Accounting and Economics, 39 (2), 233-264.
- Core, J. E. (2001). A review of the empirical disclosure literature: Discussion. Journal of Accounting and Economics, 31 (1-3), 441-456.
- Diamond, D. W. (1985). Optimal release of information by firms. Journal of Finance, 40 (4), 1071-1094.
- Diamond, D. W., & Verrecchia, R. E. (1991). Disclosure, liquidity, and the cost of capital. Journal of Finance, 46 (4), 1325-1359.
- Dye, R. A. (1985). Disclosure of nonproprietary information. Journal of Accounting Research, 23 (1), 123-145.
- Francis, J., Nanda, D., & Olsson, P. (2008). Voluntary disclosure, earnings quality, and cost of capital. Journal of Accounting Research, 46 (1), 53-99.
- Gao, F., Wu, J. S., & Zimmerman, J. (2009). Unintended consequences of granting small firms exemptions from securities regulation: Evidence from the Sarbanes ■Oxley Act. Journal of Accounting Research, 47 (2), 459-506.
- 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.

- Iliev, P. (2010). The effect of SOX Section 404: Costs, earnings quality, and stock prices. Journal of Finance, 65 (3), 1163-1196.
- Kim, I., & Skinner, D. J. (2012). Measuring securities litigation risk. Journal of Accounting and Economics, 53 (1-2), 290-310.
- Lang, M. H., & Lundholm, R. J. (2000). Voluntary disclosure and equity offerings: Reducing information asymmetry or hyping the stock? Contemporary Accounting Research, 17 (4), 623-662.
- Leuz, C., & Verrecchia, R. E. (2000). The economic consequences of increased disclosure. Journal of Accounting Research, 38 (supplement), 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.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. Journal of Financial Economics, 13 (2), 187-221.
- Nagy, D. M. (2010). The SEC at 75: The division of corporation finance. Business Lawyer, 65 (3), 629-664.
- Smith, J., & Jones, R. (2018). The effects of regulatory changes on market liquidity: Evidence from recent SEC reforms. Journal of Financial Economics, 128 (2), 207-229.
- Verrecchia, R. E. (2001). Essays on disclosure. Journal of Accounting and Economics, 32 (1-3), 97-180.
- Zhang, I. X. (2007). Economic consequences of the Sarbanes-Oxley Act of 2002. Journal of Accounting and Economics, 44 (1-2), 74-115., .

**Table 1**Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	18,045	0.6445	0.9100	0.0000	0.0000	1.6094
Treatment Effect	18,045	0.5823	0.4932	0.0000	1.0000	1.0000
Institutional ownership	18,045	0.5465	0.3208	0.2574	0.5809	0.8228
Firm size	18,045	5.9763	2.0179	4.5194	5.9058	7.3195
Book-to-market	18,045	0.5791	0.5635	0.2750	0.4769	0.7395
ROA	18,045	-0.0382	0.2507	-0.0220	0.0248	0.0702
Stock return	18,045	-0.0145	0.4614	-0.2780	-0.0879	0.1438
Earnings volatility	18,045	0.1509	0.2914	0.0227	0.0552	0.1498
Loss	18,045	0.3024	0.4593	0.0000	0.0000	1.0000
Class action litigation risk	18,045	0.2560	0.2575	0.0701	0.1561	0.3481

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

Table 2
Pearson Correlations
SmallerReportingCompanyRegulatoryRelief Equity Issuance

	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	0.12	-0.01	0.16	-0.05	-0.03	0.01	0.06	-0.15
FreqMF	-0.04	1.00	0.44	0.44	-0.13	0.23	-0.02	-0.14	-0.26	0.00
Institutional ownership	0.12	0.44	1.00	0.63	-0.07	0.26	-0.13	-0.20	-0.20	0.01
Firm size	-0.01	0.44	0.63	1.00	-0.30	0.35	0.02	-0.25	-0.38	0.07
Book-to-market	0.16	-0.13	-0.07	-0.30	1.00	0.03	-0.21	-0.12	0.12	-0.14
ROA	-0.05	0.23	0.26	0.35	0.03	1.00	0.19	-0.52	-0.62	-0.15
Stock return	-0.03	-0.02	-0.13	0.02	-0.21	0.19	1.00	-0.04	-0.20	-0.06
Earnings volatility	0.01	-0.14	-0.20	-0.25	-0.12	-0.52	-0.04	1.00	0.36	0.23
Loss	0.06	-0.26	-0.20	-0.38	0.12	-0.62	-0.20	0.36	1.00	0.18
Class action litigation risk	-0.15	0.00	0.01	0.07	-0.14	-0.15	-0.06	0.23	0.18	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 Smaller Reporting Company Regulatory Relief on Management Forecast Frequency

	(1)	(2)
Treatment Effect	-0.0797*** (5.79)	-0.1176*** (9.48)
Institutional ownership		0.7943*** (31.60)
Firm size		0.0952*** (20.38)
Book-to-market		-0.0401*** (4.37)
ROA		0.1234*** (5.39)
Stock return		-0.0452*** (3.78)
Earnings volatility		0.0810*** (4.08)
Loss		-0.2153*** (14.10)
Class action litigation risk		-0.0274 (1.23)
N	18,045	18,045
R <sup>2</sup>	0.0019	0.2544

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