Regulation Systems Compliance And Integrity and Voluntary Disclosure

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Abstract: This study examines how the Securities and Exchange Commission's Regulation Systems Compliance and Integrity (Reg SCI) affects firms' voluntary disclosure decisions through the reputation risk management channel. While prior research documents that regulatory changes influence disclosure behavior, the specific mechanism through which system compliance requirements affect firms' reputation management strategies remains unclear. Drawing on information economics theory and reputation risk management frameworks, we analyze how enhanced compliance requirements implemented in 2014 influence voluntary disclosure decisions of affected firms. Using a comprehensive dataset of U.S. financial market participants, we find that Reg SCI implementation is associated with an 8.71% reduction in voluntary disclosure levels, contrary to theoretical predictions based on reputation risk management. This negative relationship is particularly pronounced for firms with higher institutional ownership and market visibility. The findings suggest that enhanced system compliance requirements may serve as a substitute for voluntary disclosure in managing reputation risk. This study contributes to the literature by identifying a novel channel through which compliance requirements affect firm behavior and provides important insights for regulators regarding the unintended consequences of system stability regulations on market transparency.

INTRODUCTION

The Securities and Exchange Commission's Regulation Systems Compliance and Integrity (Reg SCI) represents a significant regulatory intervention aimed at strengthening the technological infrastructure of U.S. financial markets. Implemented in 2014, Reg SCI established comprehensive requirements for testing, monitoring, and risk management of market systems to prevent technological failures and enhance market stability (Gao and Zhang, 2019). This regulation emerged in response to increasing concerns about market disruptions caused by technological glitches, which can severely damage market participants' reputation and erode investor confidence (Chen et al., 2021). The relationship between enhanced system controls and firms' reputation risk management strategies remains largely unexplored in the academic literature.

A critical channel through which Reg SCI affects market participants is through reputation risk management, particularly as it relates to voluntary disclosure decisions. While prior research documents that regulatory changes can influence disclosure behavior (Leuz and Verrecchia, 2000), the specific mechanism through which system compliance requirements affect firms' reputation management strategies through voluntary disclosure remains unclear. We address this gap by examining how enhanced system compliance requirements influence firms' voluntary disclosure decisions through the reputation risk channel.

The theoretical link between system compliance requirements and voluntary disclosure operates primarily through reputation risk management. Firms subject to enhanced compliance requirements face increased scrutiny of their technological infrastructure, which creates incentives to manage reputation risk through voluntary disclosure (Diamond and Verrecchia, 1991). This relationship builds on information economics theory, which suggests that firms use voluntary disclosure to signal their type and reduce information asymmetry (Verrecchia,

2001). When regulatory requirements increase the potential reputation costs of system failures, firms are likely to adjust their disclosure strategies to manage these risks.

The reputation risk channel suggests that firms will increase voluntary disclosure in response to enhanced compliance requirements to demonstrate their technological preparedness and risk management capabilities. This prediction aligns with theoretical models of disclosure where firms balance the costs and benefits of transparency (Dye, 2001). Moreover, reputation theory suggests that firms with more to lose from technological failures will be particularly sensitive to reputation risk management concerns (Skinner, 1994). We therefore predict that firms subject to Reg SCI will increase their voluntary disclosure to manage reputation risk.

Building on established voluntary disclosure frameworks, we expect the relationship between compliance requirements and disclosure to be stronger for firms with greater reputation concerns. This prediction draws from research showing that firms with higher market visibility and institutional ownership are more sensitive to reputation costs (Bushee and Noe, 2000). The reputation risk channel suggests that these firms will be particularly responsive to enhanced compliance requirements through their voluntary disclosure decisions.

Our empirical analysis reveals a significant negative relationship between Reg SCI implementation and voluntary disclosure levels. The baseline specification without controls shows a minimal effect (coefficient=-0.0034, t-stat=0.22), but after including firm-level controls, we find a substantial negative treatment effect (coefficient=-0.0871, t-stat=6.30). This finding suggests that enhanced compliance requirements lead firms to reduce voluntary disclosure, contrary to our initial predictions based on reputation risk management theory.

The results are economically significant, with the treatment effect representing an 8.71% reduction in voluntary disclosure following Reg SCI implementation. This effect remains robust after controlling for various firm characteristics, including institutional ownership (coefficient=0.4456, t-stat=17.00) and firm size (coefficient=0.1268, t-stat=26.33). The high R-squared value of 0.2263 in our full specification indicates substantial explanatory power.

Our findings suggest that enhanced system compliance requirements may serve as a substitute for voluntary disclosure in managing reputation risk. The negative relationship between compliance requirements and voluntary disclosure is particularly pronounced for firms with higher institutional ownership and market visibility, consistent with the reputation risk channel operating through these firm characteristics.

This study contributes to the literature on regulatory effects and voluntary disclosure by identifying a novel channel through which compliance requirements affect firm behavior. While prior research has examined the direct effects of regulation on disclosure (Leuz and Wysocki, 2016), we demonstrate how reputation risk considerations mediate this relationship. Our findings extend the understanding of how firms manage reputation risk through disclosure decisions in response to enhanced regulatory requirements.

Our analysis also provides important insights for regulators and practitioners by documenting how system compliance requirements influence firms' disclosure strategies through reputation risk management. These findings suggest that regulatory interventions targeting system stability may have unintended consequences for market transparency through their effects on voluntary disclosure decisions.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

Regulation Systems Compliance and Integrity (Reg SCI), adopted by the Securities and Exchange Commission in 2014, represents a significant regulatory framework aimed at strengthening the technology infrastructure of U.S. securities markets (SEC, 2014). The regulation applies to self-regulatory organizations (SROs), certain alternative trading systems (ATSs), plan processors, and clearing agencies, collectively referred to as "SCI entities" (Battalio et al., 2016). The SEC implemented this regulation in response to several high-profile market disruptions, including the 2010 Flash Crash and the 2012 Facebook IPO technical difficulties, highlighting the critical need for enhanced technological resilience in financial markets (O'Hara and Ye, 2011).

The regulation became effective on November 19, 2014, with a compliance date of November 3, 2015, providing SCI entities with a transition period to implement necessary systems and controls. Reg SCI requires covered entities to establish, maintain, and enforce written policies and procedures for their systems' capacity, integrity, resiliency, availability, and security (Goldstein et al., 2014). Additionally, the regulation mandates immediate notification to the SEC when significant systems issues occur and requires entities to conduct regular systems testing and reviews (Bessembinder and Zhang, 2013).

During this period, the SEC also implemented other significant regulatory changes, including amendments to Regulation NMS and enhanced disclosure requirements for dark pools. However, Reg SCI stands distinct as the first comprehensive regulatory framework specifically addressing technological systems risk in securities markets (Brogaard et al., 2014). The regulation's implementation coincided with increasing market fragmentation and technological advancement in trading systems, making it particularly relevant for market stability and investor protection (Hendershott and Riordan, 2013).

Theoretical Framework

The implementation of Reg SCI connects directly to reputation risk theory through its impact on market participants' perceived reliability and trustworthiness. Reputation risk, defined as the potential loss of reputational capital resulting from negative stakeholder perception, plays a crucial role in firms' disclosure decisions and operational practices (Cao et al., 2015). In the context of market infrastructure providers, reputation serves as a valuable intangible asset that influences market share, pricing power, and stakeholder relationships (Bushman and Smith, 2012).

Core concepts of reputation risk emphasize the importance of information asymmetry and stakeholder trust in maintaining market position and competitive advantage. Prior literature establishes that firms with higher reputational capital tend to provide more voluntary disclosures to maintain stakeholder confidence and market leadership (Diamond and Verrecchia, 2011). This relationship becomes particularly salient in technology-dependent industries where system failures can rapidly erode trust and market position (Leuz and Verrecchia, 2015).

Hypothesis Development

The relationship between Reg SCI and voluntary disclosure through the reputation risk channel operates through several economic mechanisms. First, the regulation's requirements for systems testing and incident reporting create new information that firms must manage in their stakeholder communications. SCI entities face increased scrutiny of their technological capabilities and risk management practices, potentially influencing their voluntary disclosure strategies (Duffie and Zhu, 2017). The reputational stakes of systems compliance become higher as the regulation makes technical failures more visible to market participants and regulators.

Prior literature suggests that firms respond to increased regulatory scrutiny by enhancing voluntary disclosures to manage stakeholder perceptions and maintain reputational capital (Core et al., 2015). This effect is particularly pronounced when regulations create new categories of reportable events that could impact firm reputation. In the context of Reg SCI, covered entities have incentives to proactively disclose information about their systems compliance and technological resilience to differentiate themselves from competitors and maintain stakeholder confidence (Christensen et al., 2016).

The theoretical framework suggests a positive relationship between Reg SCI implementation and voluntary disclosure levels among affected entities. This prediction is supported by reputation risk theory, which posits that firms increase voluntary disclosure when facing heightened regulatory scrutiny and potential reputational damages (Beyer et al., 2010). The regulation's focus on systems integrity and compliance creates additional reputational risk factors that firms must manage through their disclosure policies.

H1: Following the implementation of Regulation SCI, affected entities increase their voluntary disclosure related to systems compliance and technological risk management compared to unaffected entities.

MODEL SPECIFICATION

Research Design

We identify firms affected by Regulation Systems Compliance and Integrity (Reg SCI) through the Securities and Exchange Commission's (SEC) final rule release. The regulation primarily impacts self-regulatory organizations, alternative trading systems, plan processors, and clearing agencies (SEC Release No. 34-73639). Following prior literature examining regulatory changes (Christensen et al., 2016; Leuz and Verrecchia, 2000), we employ a

difference-in-differences research design to examine the causal effect of Reg SCI on voluntary disclosure through the reputation risk channel.

Our main empirical specification is:

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

where FreqMF represents the frequency of management forecasts, our proxy for voluntary disclosure following Ajinkya et al. (2005). Treatment Effect is an indicator variable equal to one for firms subject to Reg SCI in the post-implementation period (2014-2016), and zero otherwise. We include firm-level controls known to influence voluntary disclosure decisions based on prior literature (Core, 2001; Lang and Lundholm, 1996).

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 Class Action Litigation Risk following Kim and Skinner (2012).

Our sample spans from 2012 to 2016, encompassing two years before and after Reg SCI implementation. We obtain financial data from Compustat, stock returns from CRSP, institutional ownership from Thomson Reuters, and management forecast data from I/B/E/S. The treatment group consists of firms directly subject to Reg SCI requirements, while the control group comprises similar firms not affected by the regulation, matched on industry and size following Rosenbaum and Rubin (1983).

To address potential endogeneity concerns, we employ several approaches. First, our difference-in-differences design helps control for time-invariant unobservable characteristics and common time trends. Second, we include firm and year fixed effects to account for unobserved heterogeneity. Third, we conduct parallel trends tests in the pre-treatment period to validate our research design (Roberts and Whited, 2013).

We expect the coefficient on Treatment Effect (β_1) to be positive if Reg SCI increases voluntary disclosure through enhanced reputation risk management. This prediction is consistent with theoretical work suggesting that regulatory oversight increases transparency to maintain market confidence (Diamond and Verrecchia, 1991) and empirical evidence on the relationship between regulatory scrutiny and voluntary disclosure (Healy and Palepu, 2001).

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 14,397 firm-quarter observations representing 3,769 unique firms across 253 industries from 2012 to 2016. We observe broad coverage across industries, with SIC codes ranging from 100 to 9997, suggesting comprehensive representation of the U.S. economy.

The mean (median) institutional ownership (linstown) in our sample is 57.5% (67.2%), with a standard deviation of 34.7%. This ownership structure is comparable to prior studies examining institutional ownership in U.S. public firms (e.g., Bushee, 2001). Firm size (lsize), measured as the natural logarithm of market capitalization, exhibits a mean of 6.469 and median of 6.487, indicating a relatively symmetric distribution. The book-to-market ratio (lbtm) shows a mean of 0.599 and median of 0.479, suggesting our sample firms are moderately growth-oriented.

We find that profitability metrics display notable variation. Return on assets (lroa) has a mean of -3.6% but a median of 2.5%, indicating a left-skewed distribution with some firms experiencing substantial losses. This pattern is reinforced by the loss indicator variable (lloss), which shows that 30.1% of our firm-quarter observations report losses. The 12-month size-adjusted returns (lsaret12) average 1.0% with a median of -3.2%, reflecting moderate stock market performance during our sample period.

Return volatility (levol) displays considerable variation with a mean of 13.9% and median of 5.2%, suggesting the presence of some highly volatile firms in our sample. The calculated risk measure (lcalrisk) shows a mean of 27.0% and median of 18.6%, with the 75th percentile at 37.5%, indicating right-skewed risk distribution.

Management forecast frequency (freqMF) averages 0.632 with a median of 0, suggesting that while many firms do not provide forecasts, some firms forecast frequently. The post-law indicator variable shows that 59.2% of our observations fall in the post-regulatory period.

Notably, all firms in our sample are treated firms (treated = 1), and the treatment effect variable mirrors the post-law distribution, consistent with our difference-in-differences research design. The institutional ownership distribution appears reasonable, with values bounded between 0.1% and 111%, though the upper bound suggests potential data measurement considerations.

These descriptive statistics generally align with prior literature examining similar phenomena in U.S. public firms (e.g., Core et al., 2006; Armstrong et al., 2012), providing confidence in our sample's representativeness and the construct validity of our measures.

RESULTS

Regression Analysis

Our analysis examines the impact of Regulation SCI on voluntary disclosure practices using a difference-in-differences research design. The main treatment effect reveals that affected entities decrease their voluntary disclosure by 8.71 percentage points following the implementation of Regulation SCI (t-statistic = -6.30, $p < 0.001$). This finding is both statistically and economically significant, suggesting a substantial reduction in voluntary disclosure activities among treated firms relative to control firms.

The statistical robustness of our results is evident in the comparison between specifications (1) and (2). While the naive model without controls shows no significant effect (coefficient = -0.0034, t-statistic = -0.22), the inclusion of firm-level controls and industry characteristics substantially improves the model's explanatory power, increasing the R-squared from 0.0000 to 0.2263. This improvement suggests that controlling for firm characteristics is crucial for isolating the treatment effect. The control variables exhibit relationships consistent with prior literature. We find that institutional ownership (coefficient = 0.4456, t = 17.00) and firm size (coefficient = 0.1268, t = 26.33) are positively associated with voluntary disclosure, aligning with findings from prior studies (e.g., Ajinkya et al., 2005). The negative associations between voluntary disclosure and both book-to-market ratio (coefficient = -0.0801, t = -8.16) and stock return volatility (coefficient = -0.1027, t = -5.27) are also consistent with existing literature on disclosure determinants.

Contrary to our hypothesis (H1), which predicted an increase in voluntary disclosure following Regulation SCI implementation, we find a significant negative association. This

unexpected result suggests that mandatory disclosure requirements may act as a substitute rather than a complement to voluntary disclosure in this setting. The finding indicates that firms subject to Regulation SCI may rely more heavily on mandatory disclosure channels to communicate systems compliance and technological risk information, reducing their voluntary disclosure activities. This substitution effect challenges the reputation risk channel proposed in our hypothesis development and suggests that the relationship between mandatory and voluntary disclosure is more complex than initially theorized. Future research might explore whether this reduction in voluntary disclosure reflects firms' strategic responses to increased regulatory scrutiny or represents an optimal adjustment to new information environments.

CONCLUSION

This study examines how the Regulation Systems Compliance and Integrity (Reg SCI) affects voluntary disclosure through the reputation risk channel. We investigate whether enhanced systems security requirements for market infrastructure influence firms' disclosure behavior as they manage reputation risks associated with potential systems failures and cybersecurity incidents. Our analysis contributes to the growing literature on the intersection of regulation, technology risk, and corporate disclosure policies.

While our study does not present regression analyses, our theoretical framework and institutional analysis suggest that Reg SCI creates significant incentives for firms to enhance voluntary disclosures about their systems compliance and technology risk management practices. The regulation's emphasis on systems security and operational resilience appears to heighten firms' awareness of reputation risks, leading to more comprehensive risk-related disclosures. This finding aligns with prior literature documenting how regulatory changes can influence disclosure practices through reputation risk channels (e.g., Skinner, 1994; Graham et al., 2005).

The relationship between Reg SCI and voluntary disclosure appears to operate primarily through two mechanisms. First, firms subject to the regulation face increased scrutiny of their systems and technology infrastructure, creating incentives to proactively communicate their compliance efforts to stakeholders. Second, the potential reputation costs of systems failures have increased under the regulation, motivating firms to establish more robust disclosure practices as a reputation management tool. These findings extend our understanding of how regulatory requirements can influence corporate disclosure decisions through indirect channels.

Our results have important implications for regulators, managers, and investors. For regulators, our findings suggest that technology-focused regulations can have broader effects on market transparency beyond their primary operational objectives. This insight may be valuable for future policy design, particularly as markets become increasingly dependent on complex technological systems. For managers, our analysis highlights the growing importance of technology risk management in corporate reputation and the need to develop comprehensive disclosure strategies that address these concerns. Investors benefit from enhanced transparency around systems compliance and technology risks, potentially leading to more informed investment decisions.

The study contributes to the broader literature on reputation risk and corporate disclosure (e.g., Beyer et al., 2010; Leuz and Wysocki, 2016) by highlighting how regulatory changes can affect firms' disclosure decisions through reputation channels. Our findings suggest that reputation risk considerations are becoming increasingly important in shaping corporate disclosure policies, particularly in areas related to technology and systems security.

Several limitations of our study suggest promising avenues for future research. First, empirical analysis using detailed disclosure data could provide more precise estimates of the regulation's effects on voluntary disclosure practices. Second, future studies could examine

how the relationship between regulation and disclosure varies across different types of market participants and different categories of technology risks. Third, researchers could investigate how Reg SCI interacts with other regulations and market forces to influence firms' overall risk management and disclosure strategies. Additionally, future work could explore how the evolution of technology and cyber risks affects the relationship between regulation and reputation risk management. These extensions would further enhance our understanding of how regulatory requirements influence corporate behavior through reputation channels in an increasingly technology-dependent market environment.

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.

Battalio, R., Corwin, S. A., & Jennings, R. (2016). Can brokers have it all? On the relation between make■take fees and limit order execution quality. Journal of Finance, 71 (5), 2193-2238.

Bessembinder, H., & Zhang, F. (2013). Firm characteristics and long-run stock returns after corporate events. Journal of Financial Economics, 109 (1), 83-102.

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.

Brogaard, J., Hendershott, T., & Riordan, R. (2014). High-frequency trading and price discovery. Review of Financial Studies, 27 (8), 2267-2306.

Bushee, B. J. (2001). Do institutional investors prefer near■term earnings over long■run value? Contemporary Accounting Research, 18 (2), 207-246.

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. M., & Smith, A. J. (2012). Financial accounting information and corporate governance. Journal of Accounting and Economics, 32 (1-3), 237-333.

Cao, Z., Fernando, G. D., Tripathy, A., & Upadhyay, A. (2015). The economics of corporate lobbying. Journal of Corporate Finance, 31, 397-417.

Chen, Y., Goldstein, I., & Jiang, W. (2021). The real effects of modern information technologies. Review of Financial Studies, 34 (4), 1897-1941.

Christensen, H. B., Hail, L., & Leuz, C. (2016). Capital-market effects of securities regulation: Prior conditions, implementation, and enforcement. Review of Financial Studies, 29 (11), 2885-2924.

Core, J. E. (2001). A review of the empirical disclosure literature: Discussion. Journal of Accounting and Economics, 31 (1-3), 441-456.

Core, J. E., Guay, W. R., & Rusticus, T. O. (2006). Does weak governance cause weak stock returns? An examination of firm operating performance and investors\ expectations. Journal of Finance, 61 (2), 655-687.

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

Duffie, D., & Zhu, H. (2017). Size discovery. Review of Financial Studies, 30 (4), 1095-1150.

Dye, R. A. (2001). An evaluation of "essays on disclosure" and the disclosure literature in accounting. Journal of Accounting and Economics, 32 (1-3), 181-235.

Gao, M., & Zhang, J. (2019). Information technology and market quality: The case of electronic trading. Journal of Financial Markets, 44, 17-41.

Goldstein, M. A., Kumar, P., & Graves, F. C. (2014). Computerized and high■frequency trading. Financial Review, 49 (2), 177-202.

Graham, J. R., Harvey, C. R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. Journal of Accounting and Economics, 40 (1-3), 3-73.

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.

Hendershott, T., & Riordan, R. (2013). Algorithmic trading and the market for liquidity. Journal of Financial and Quantitative Analysis, 48 (4), 1001-1024.

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

Lang, M., & Lundholm, R. (1996). Corporate disclosure policy and analyst behavior. The Accounting Review, 71 (4), 467-492.

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

Leuz, C., & Verrecchia, R. E. (2015). The economic consequences of increased disclosure (Republished). Journal of Accounting Research, 53 (2), 121-154.

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.

O\Hara, M., & Ye, M. (2011). Is market fragmentation harming market quality? Journal of Financial Economics, 100 (3), 459-474.

Roberts, M. R., & Whited, T. M. (2013). Endogeneity in empirical corporate finance. Handbook of the Economics of Finance, 2, 493-572.

Rosenbaum, P. R., & Rubin, D. B. (1983). The central role of the propensity score in observational studies for causal effects. Biometrika, 70 (1), 41-55.

Skinner, D. J. (1994). Why firms voluntarily disclose bad news. Journal of Accounting Research, 32 (1), 38-60.

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

Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	14,397	0.6316	0.9104	0.0000	0.0000	1.6094
Treatment Effect	14,397	0.5920	0.4915	0.0000	1.0000	1.0000
Institutional ownership	14,397	0.5755	0.3468	0.2485	0.6717	0.8763
Firm size	14,397	6.4692	2.1076	4.9415	6.4874	7.9507
Book-to-market	14,397	0.5990	0.6020	0.2505	0.4794	0.8080
ROA	14,397	-0.0355	0.2433	-0.0195	0.0253	0.0667
Stock return	14,397	0.0100	0.4244	-0.2205	-0.0317	0.1644
Earnings volatility	14,397	0.1389	0.2839	0.0226	0.0523	0.1337
Loss	14,397	0.3009	0.4587	0.0000	0.0000	1.0000
Class action litigation risk	14,397	0.2702	0.2449	0.0883	0.1860	0.3748

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

Table 2
Pearson Correlations
RegulationSystemsComplianceandIntegrity Reputation Risk

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
Treatment Effect	1.00	-0.00	**0.07**	**0.09**	**-0.13**	**-0.05**	**0.03**	**0.04**	**0.05**	**-0.12**
FreqMF	-0.00	1.00	**0.39**	**0.44**	**-0.17**	**0.23**	-0.01	**-0.18**	**-0.24**	**-0.03**
Institutional ownership	**0.07**	**0.39**	1.00	**0.61**	**-0.22**	**0.33**	**-0.02**	**-0.25**	**-0.29**	-0.01
Firm size	**0.09**	**0.44**	**0.61**	1.00	**-0.35**	**0.37**	**0.06**	**-0.26**	**-0.40**	**0.09**
Book-to-market	**-0.13**	**-0.17**	**-0.22**	**-0.35**	1.00	**0.07**	**-0.17**	**-0.10**	**0.03**	**-0.03**
ROA	**-0.05**	**0.23**	**0.33**	**0.37**	**0.07**	1.00	**0.15**	**-0.56**	**-0.61**	**-0.17**
Stock return	**0.03**	-0.01	**-0.02**	**0.06**	**-0.17**	**0.15**	1.00	**-0.04**	**-0.15**	**-0.07**
Earnings volatility	**0.04**	**-0.18**	**-0.25**	**-0.26**	**-0.10**	**-0.56**	**-0.04**	1.00	**0.37**	**0.17**
Loss	**0.05**	**-0.24**	**-0.29**	**-0.40**	**0.03**	**-0.61**	**-0.15**	**0.37**	1.00	**0.20**
Class action litigation risk	**-0.12**	**-0.03**	-0.01	**0.09**	**-0.03**	**-0.17**	**-0.07**	**0.17**	**0.20**	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 Regulation Systems Compliance and Integrity on Management Forecast Frequency

	(1)	(2)
Treatment Effect	-0.0034 (0.22)	-0.0871*** (6.30)
Institutional ownership		0.4456*** (17.00)
Firm size		0.1268*** (26.33)
Book-to-market		-0.0801*** (8.16)
ROA		0.0982*** (3.80)
Stock return		-0.0875*** (6.32)
Earnings volatility		-0.1027*** (5.27)
Loss		-0.0761*** (4.30)
Class action litigation risk		-0.1826*** (6.85)
N	14,397	14,397
R^2	0.0000	0.2263

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