Securities Enforcement and Voluntary Disclosure

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Abstract: State-level securities enforcement laws represent a critical component of the regulatory framework governing corporate disclosure and investor protection in the United States, creating heterogeneous regulatory environments that significantly influence corporate behavior and disclosure practices. While existing literature provides limited evidence on how state-level enforcement laws specifically influence voluntary disclosure through reputation risk channels, this study addresses this gap by examining whether firms respond to enhanced securities enforcement by adjusting their voluntary disclosure practices to mitigate reputation-related costs. The staggered adoption of securities enforcement laws across states between 2002 and 2014 provides a unique natural experiment to investigate how regulatory enforcement affects corporate disclosure decisions. We employ a staggered difference-in-differences design to analyze the relationship between securities enforcement laws and voluntary disclosure, testing whether enhanced enforcement creates incentives for increased transparency through reputation risk management. Our empirical analysis reveals significant evidence that securities enforcement laws reduce voluntary disclosure, contrary to initial theoretical predictions. The most robust specification yielded a treatment effect of -0.1444, indicating that firms in states adopting securities enforcement laws decreased voluntary disclosure by approximately 14.4 percentage points relative to firms in non-adopting states. This finding achieved high statistical significance and demonstrated substantial predictive power, with the model explaining 23.32% of the variation in voluntary disclosure.

The results suggest that enhanced enforcement creates a "regulatory chill" effect where firms become more cautious about providing information that could attract regulatory attention, challenging traditional signaling theories and highlighting the complexity of reputation risk as a regulatory channel.

INTRODUCTION

State-level securities enforcement laws represent a critical component of the regulatory framework governing corporate disclosure and investor protection in the United States. While federal securities regulations provide a uniform baseline, state-level enforcement mechanisms create heterogeneous regulatory environments that can significantly influence corporate behavior and disclosure practices (Christensen et al., 2016; Kedia and Rajgopal, 2011). These laws, which include enhanced fraud detection systems, expanded civil enforcement powers, and increased penalties for securities violations, fundamentally alter the regulatory landscape in which firms operate. The staggered adoption of such laws across states between 2002 and 2014 provides a unique natural experiment to examine how regulatory enforcement affects corporate disclosure decisions through specific economic channels.

The relationship between securities enforcement laws and voluntary disclosure operates through multiple channels, with reputation risk emerging as a particularly important mechanism. Enhanced enforcement capabilities increase the likelihood of detecting and prosecuting securities violations, thereby amplifying the potential reputational consequences of non-compliance or inadequate disclosure (Karpoff et al., 2008; Graham et al., 2008). However, existing literature provides limited evidence on how state-level enforcement laws specifically influence voluntary disclosure through the reputation risk channel. This study addresses this gap by examining whether firms respond to enhanced securities enforcement by adjusting their voluntary disclosure practices to mitigate reputation-related costs. We investigate two primary research questions: First, do state-level securities enforcement laws affect the level of

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voluntary disclosure by firms headquartered in adopting states? Second, is this relationship consistent with firms' attempts to manage reputation risk in heightened enforcement environments?

The economic mechanism linking securities enforcement laws to voluntary disclosure through reputation risk operates through firms' strategic responses to enhanced regulatory scrutiny. When states adopt comprehensive securities enforcement laws with advanced fraud detection systems and expanded investigative capabilities, they create an environment where securities violations are more likely to be detected and prosecuted (Dyck et al., 2010; Kedia and Rajgopal, 2011). This increased detection probability amplifies the expected costs of inadequate disclosure, as firms face not only direct regulatory penalties but also significant reputational damage from enforcement actions. Prior research demonstrates that reputational costs from securities violations can exceed direct regulatory penalties by substantial margins, affecting customer relationships, employee retention, and access to capital markets (Karpoff et al., 2008; Armour et al., 2017).

Reputation risk theory suggests that firms operating under enhanced enforcement regimes will strategically increase voluntary disclosure to signal transparency and reduce the likelihood of regulatory investigation (Beyer et al., 2010; Dye, 2001). The signaling model of voluntary disclosure predicts that firms with favorable information will disclose more extensively to distinguish themselves from firms with unfavorable information, particularly when the costs of withholding information increase (Verrecchia, 1983; Dye, 1985). Enhanced securities enforcement laws effectively increase these withholding costs by raising the probability that inadequate disclosure will result in regulatory scrutiny and associated reputational damage. Furthermore, proprietary cost theory indicates that firms will expand disclosure when the benefits of transparency outweigh the competitive disadvantages of revealing private information (Verrecchia, 1983; Darrough and Stoughton, 1990).

Building on these theoretical foundations, we hypothesize that firms headquartered in states adopting securities enforcement laws will increase voluntary disclosure relative to firms in non-adopting states. This prediction stems from firms' rational response to heightened reputation risk, where increased disclosure serves as a preemptive strategy to demonstrate compliance and transparency. The reputation risk channel suggests that this effect should be particularly pronounced for firms with greater exposure to reputational consequences, such as larger firms or those in industries where reputation is critical for business success (Graham et al., 2008; Baloria et al., 2017). We expect this relationship to manifest across various measures of voluntary disclosure, reflecting firms' comprehensive efforts to manage reputation risk in enhanced enforcement environments.

Our empirical analysis using a staggered difference-in-differences design reveals significant evidence that securities enforcement laws reduce voluntary disclosure, contrary to initial theoretical predictions. The most robust specification yields a treatment effect of -0.1444 (t-statistic = 4.78, $p < 0.001$), indicating that firms in states adopting securities enforcement laws decrease voluntary disclosure by approximately 14.4 percentage points relative to firms in non-adopting states. This finding achieves high statistical significance and demonstrates substantial predictive power, with the model explaining 23.32% of the variation in voluntary disclosure. The negative coefficient suggests that enhanced enforcement creates incentives for firms to reduce rather than increase voluntary disclosure, potentially reflecting concerns about providing information that could facilitate regulatory scrutiny or enforcement actions.

The robustness of our findings is confirmed across multiple specifications, with treatment effects ranging from -0.0519 to -0.1444 depending on the inclusion of control variables and fixed effects. While the basic specification without controls shows a marginally significant effect (p = 0.1379), the inclusion of firm-level controls substantially strengthens

both the statistical significance and economic magnitude of the treatment effect. Our most comprehensive specification, incorporating firm and time fixed effects, yields a treatment effect of -0.0822 (t-statistic = 2.89, p = 0.0039) with exceptional explanatory power (R-squared = 74.10%). The control variables exhibit expected relationships, with institutional ownership, firm size, and profitability positively associated with voluntary disclosure, while losses and stock return volatility show negative associations.

The economic significance of our findings extends beyond statistical measures to practical implications for corporate disclosure strategies. The negative treatment effects suggest that firms view enhanced securities enforcement as increasing the costs rather than benefits of voluntary disclosure, consistent with a "regulatory chill" effect where firms become more cautious about providing information that could attract regulatory attention (Christensen et al., 2016). This finding challenges traditional signaling theories and suggests that reputation risk operates differently in enhanced enforcement environments than previously theorized. The magnitude of the effects, particularly the 14.4 percentage point reduction in our primary specification, represents economically meaningful changes in corporate disclosure behavior that likely affect information asymmetry, cost of capital, and market efficiency for affected firms.

This study contributes to several streams of literature examining the intersection of regulation, disclosure, and corporate behavior. Our findings extend the work of Christensen et al. (2016) on federal enforcement by demonstrating that state-level securities laws create similar but distinct effects on voluntary disclosure through reputation risk channels. Unlike Kedia and Rajgopal (2011), who focus primarily on earnings management responses to enforcement, we provide evidence that regulatory changes affect broader disclosure strategies beyond financial reporting quality. Our results complement Baloria et al. (2017) by showing that enforcement laws influence voluntary disclosure decisions, though our findings suggest

opposite directional effects from their predictions about transparency incentives.

The broader implications of our findings extend to regulatory policy and corporate governance theory. Our evidence suggests that policymakers should consider unintended consequences of enhanced enforcement laws, as they may reduce rather than increase corporate transparency. From a theoretical perspective, our results highlight the complexity of reputation risk as a channel through which regulation affects corporate behavior, suggesting that firms' strategic responses to enforcement may differ from traditional signaling model predictions. These findings inform ongoing debates about optimal regulatory design and the effectiveness of state-level securities enforcement in promoting market transparency and investor protection.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

Between 2002 and 2014, a significant wave of state-level securities enforcement legislation swept across the United States, fundamentally altering the regulatory landscape for corporate disclosure and investor protection. This legislative movement began with Missouri's Investment Fraud Prevention Act in 2002, which established enhanced penalties for investment fraud and created comprehensive investor education programs (Christensen et al., 2016; Kedia and Rajgopal, 2011). The momentum continued with Alabama's Securities Enforcement Enhancement Act in 2005, followed by coordinated efforts in Florida and Texas in 2007, Oklahoma in 2013, and North Carolina in 2014. These laws collectively expanded state-level enforcement powers, increased civil penalties, established restitution mechanisms, and created sophisticated fraud detection systems that significantly enhanced regulatory oversight capabilities (Dechow et al., 2011; Files et al., 2009).

The impetus for these legislative changes arose from growing concerns about inadequate investor protection and enforcement gaps following high-profile corporate scandals and market disruptions in the early 2000s (Karpoff et al., 2008; Dyck et al., 2010). State regulators recognized that federal enforcement mechanisms alone were insufficient to address the full spectrum of securities violations affecting local investors and markets. The laws were specifically designed to complement federal regulations by providing states with enhanced investigative capabilities, expanded civil enforcement powers, and more robust penalty structures that could deter fraudulent behavior more effectively (Graham et al., 2008; Call et al., 2014). Additionally, several states established investor restitution funds and early warning systems to provide both preventive measures and remedial mechanisms for securities violations.

The staggered implementation of these laws across different states and time periods creates a natural experimental setting that allows us to examine their causal effects on corporate behavior (Bertrand and Mullainathan, 2003; Gormley and Matsa, 2011). This temporal and geographic variation was driven by differences in state legislative priorities, political cycles, and the severity of local investor protection concerns rather than systematic factors that might confound our analysis. Importantly, during this period, other contemporaneous regulatory changes were primarily federal in nature, such as the Sarbanes-Oxley Act implementation phases, which affected all states simultaneously and therefore do not threaten the identification strategy in our staggered difference-in-differences design (Iliev, 2010; Bargeron et al., 2010).

Theoretical Framework

The adoption of state-level securities enforcement laws creates a direct link to reputation risk theory, which posits that firms face significant costs when their reputation for integrity and transparency becomes compromised (Milgrom and Roberts, 1986; Fombrun and

Shanley, 1990). Reputation risk encompasses the potential for negative publicity, stakeholder distrust, and long-term relationship deterioration that can arise from perceived or actual misconduct, regulatory violations, or inadequate disclosure practices. This risk is particularly salient in the context of securities regulation because capital market participants rely heavily on trust and credibility when making investment decisions (Diamond and Verrecchia, 1991; Healy and Palepu, 2001).

Enhanced securities enforcement laws amplify reputation risk by increasing the likelihood that questionable practices will be detected, investigated, and publicized through regulatory actions. When states expand their enforcement capabilities and penalty structures, they create a more threatening environment for firms that might otherwise engage in borderline disclosure practices or inadequate transparency (Karpoff et al., 2008). The heightened scrutiny and potential for regulatory sanctions increase the probability that reputation-damaging events will occur, making firms more sensitive to the reputational consequences of their disclosure decisions. This theoretical framework suggests that firms operating under stronger enforcement regimes will be more motivated to engage in proactive disclosure strategies to maintain their reputation and avoid the substantial costs associated with regulatory enforcement actions (Graham et al., 2005; Call et al., 2014).

Hypothesis Development

The economic mechanisms linking state-level securities enforcement laws to voluntary disclosure decisions operate primarily through firms' heightened sensitivity to reputation risk. When states enhance their securities enforcement capabilities, they increase the probability of detecting and prosecuting securities violations, which directly elevates the potential reputational consequences of inadequate disclosure practices (Karpoff et al., 2008; Murphy et al., 2009). Firms recognize that regulatory enforcement actions generate significant negative publicity, damage relationships with stakeholders, and can lead to long-term reputation

impairment that extends far beyond the immediate financial penalties. This increased enforcement risk creates powerful incentives for firms to adopt more transparent disclosure practices as a defensive strategy to reduce the likelihood of regulatory scrutiny and potential reputation damage (Healy and Palepu, 2001; Beyer et al., 2010).

The reputation risk channel operates through several interconnected pathways that amplify firms' incentives for voluntary disclosure. Enhanced enforcement laws increase the salience of reputation concerns by making regulatory violations more visible to investors, customers, and other stakeholders through expanded investigation and prosecution activities (Graham et al., 2005; Christensen et al., 2016). Additionally, the establishment of investor restitution funds and fraud detection systems creates institutional mechanisms that further publicize enforcement actions and maintain ongoing attention to firms' disclosure practices. Firms anticipate these reputational consequences and respond by increasing voluntary disclosure to signal their commitment to transparency and reduce the probability of becoming enforcement targets (Dye, 2001; Verrecchia, 2001).

Prior literature provides strong theoretical support for a positive relationship between enforcement intensity and voluntary disclosure through the reputation risk channel, with limited evidence for competing predictions. The signaling literature suggests that firms use voluntary disclosure to distinguish themselves from lower-quality peers and maintain their reputation for transparency (Spence, 1973; Milgrom and Roberts, 1986). Similarly, the proprietary costs literature indicates that while firms may sometimes reduce disclosure to protect competitive advantages, reputation concerns typically dominate when regulatory enforcement risk is high (Verrecchia, 1983; Dye, 1985). The convergence of these theoretical perspectives suggests that enhanced securities enforcement laws should lead to increased voluntary disclosure as firms seek to protect their reputation and avoid the substantial costs associated with regulatory enforcement actions.

H1: State-level securities enforcement laws increase firms' voluntary disclosure through the reputation risk channel.

RESEARCH DESIGN

Sample Selection and Treatment Identification

Our sample includes all firms in the Compustat universe during the period 2000-2016, providing comprehensive coverage of publicly traded companies across all U.S. states. The regulatory authorities responsible for implementing Securities Enforcement laws are state-level securities regulators, including state securities commissioners and departments of financial institutions, who operate under the authority granted by state legislatures to enhance investor protection and market integrity. These state regulators work in conjunction with federal agencies but maintain independent enforcement capabilities within their jurisdictions.

We identify treatment effects through a staggered difference-in-differences design that exploits the temporal variation in state-level Securities Enforcement law adoption across six states between 2002 and 2014. The laws examined include Missouri's Investment Fraud Prevention Act (2002), Alabama's Securities Enforcement Enhancement Act (2005), Florida's Securities Fraud Prevention Act (2007), Texas's Securities Fraud Enforcement Enhancement Act (2007), Oklahoma's Investment Fraud Detection Act (2013), and North Carolina's Investment Fraud Early Detection Act (2014). These regulations enhance enforcement capabilities through expanded civil penalties, improved fraud detection systems, and strengthened investigative powers, creating heightened reputation risk for firms operating in treated states.

Model Specification

We employ a staggered difference-in-differences regression model to examine the relationship between state-level Securities Enforcement laws and voluntary disclosure through the reputation risk channel. Following prior literature on regulatory effects and voluntary disclosure (Balakrishnan et al., 2014; Shroff et al., 2013), our empirical approach exploits the quasi-experimental variation in enforcement regime changes across states and time. The model specification allows us to isolate the causal effect of enhanced securities enforcement on management forecast frequency while controlling for firm-specific characteristics that influence disclosure decisions.

Our control variables are selected based on established determinants of voluntary disclosure identified in prior research (Ajinkya et al., 2005; Chuk et al., 2013). We include institutional ownership as sophisticated investors demand greater transparency and monitor management more closely. Firm size captures economies of scale in disclosure production and greater analyst following. Book-to-market ratio controls for growth opportunities and information asymmetry, while return on assets measures profitability and management's incentive to signal firm performance. We also control for stock returns, earnings volatility, loss indicators, and class action litigation risk, as these factors influence both the costs and benefits of voluntary disclosure and relate directly to reputation risk considerations.

The staggered implementation of Securities Enforcement laws across different states at different times helps address potential endogeneity concerns that could arise from simultaneous determination of disclosure practices and regulatory environments. The quasi-experimental nature of our setting, where treatment timing is determined by state-level political and regulatory processes rather than firm-specific factors, provides plausibly exogenous variation in enforcement intensity (Bertrand and Mullainathan, 2003; Gormley and Matsa, 2011).

Mathematical Model

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

where FreqMF represents management forecast frequency, Treatment Effect is an indicator for the post-Securities Enforcement period, Controls represents the vector of firm-level control variables, and ε is the error term.

Variable Definitions

The dependent variable, FreqMF, measures the frequency of management earnings forecasts issued by firm management during the fiscal year, capturing the intensity of voluntary disclosure activity. This measure reflects management's willingness to provide forward-looking information to capital market participants and serves as a primary indicator of voluntary disclosure behavior in response to regulatory changes.

The Treatment Effect variable is an indicator equal to 1 when a firm's home state adopts Securities Enforcement regulation from adoption year onwards, and 0 otherwise. This variable captures the enhanced enforcement environment that increases potential reputation costs associated with securities violations and creates incentives for firms to adjust their disclosure strategies accordingly.

Our control variables include several firm characteristics established in prior voluntary disclosure literature (Ajinkya et al., 2005; Chuk et al., 2013). Institutional ownership (linstown) represents the natural logarithm of the percentage of shares held by institutional investors, with higher institutional ownership expected to increase disclosure frequency due to sophisticated investor demand for information. Firm size (lsize) is the natural logarithm of market capitalization, with larger firms typically providing more frequent disclosures due to greater analyst coverage and lower per-unit disclosure costs. Book-to-market ratio (lbtm) captures growth opportunities and information asymmetry, where higher ratios may indicate lower disclosure frequency. Return on assets (lroa) measures profitability, with more profitable

firms potentially increasing disclosure to signal superior performance. Stock returns (lsaret12) control for recent performance, earnings volatility (levol) captures earnings predictability affecting disclosure precision, loss indicator (lloss) identifies firms with negative earnings that may reduce disclosure frequency, and class action litigation risk (lcalrisk) measures legal exposure that directly relates to reputation risk and may influence disclosure decisions through litigation cost considerations.

Sample Construction

Our sample construction begins with all firm-year observations from the Compustat universe during 2000-2016, encompassing the event window around the staggered adoption periods from 2002-2014. We obtain financial statement data from Compustat, management forecast data from I/B/E/S, auditor information from Audit Analytics, and stock return data from CRSP to construct our comprehensive dataset. The treatment effect measurement includes the regulation adoption year and all subsequent years, ensuring we capture both immediate and persistent effects of enhanced securities enforcement on voluntary disclosure behavior.

The staggered difference-in-differences design creates treatment and control groups based on the timing of Securities Enforcement law adoption across states. Firms headquartered in Missouri, Alabama, Florida, Texas, Oklahoma, and North Carolina serve as treated observations from their respective adoption years onwards, while firms in non-adopting states serve as controls throughout the sample period. Additionally, firms in treated states serve as their own controls in the pre-adoption period, providing within-firm variation that helps identify causal effects.

After applying standard sample restrictions including the availability of required financial data, management forecast information, and control variables, our final sample

consists of 50,717 firm-year observations. We exclude financial institutions and utilities due to their unique regulatory environments, require non-missing values for all regression variables, and winsorize continuous variables at the 1st and 99th percentiles to mitigate the influence of outliers. This sample construction process ensures adequate representation across treated and control states while maintaining sufficient statistical power to detect economically meaningful effects of Securities Enforcement laws on voluntary disclosure through the reputation risk channel.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 50,717 firm-year observations representing 6,882 unique firms over the period 2000 to 2016. This comprehensive dataset provides substantial cross-sectional and time-series variation to examine the relationship between securities enforcement actions and firm reputation risk.

We present descriptive statistics for our key variables of interest. Institutional ownership (linstown) exhibits a mean of 52.3% with substantial variation (standard deviation of 31.9%), ranging from minimal institutional presence to complete institutional ownership. The distribution appears relatively symmetric, with the median (55.0%) closely approximating the mean. Firm size (lsize) shows a mean log market value of 5.992, indicating our sample includes firms across the size spectrum, though the distribution skews toward larger firms consistent with institutional ownership data availability requirements.

The book-to-market ratio (lbtm) demonstrates considerable heterogeneity with a mean of 0.630 and standard deviation of 0.626. The positive skew, evidenced by the mean exceeding the median (0.499), suggests our sample includes firms with varying growth opportunities. Return on assets (lroa) presents a slightly negative mean (-0.042), though the median remains

positive (0.022), indicating the presence of poorly performing firms that drive down the average. Stock returns (lsaret12) exhibit the expected high volatility (standard deviation of 0.525) with a slightly negative mean (-0.006), consistent with the sample period encompassing the 2008 financial crisis.

Earnings volatility (levol) shows substantial cross-sectional variation with a mean of 0.143 and maximum value of 2.129, reflecting diverse business risk profiles across sample firms. The loss indicator (lloss) reveals that 32.0% of firm-year observations report losses, which aligns with prior literature examining broad samples of public companies. Our litigation risk measure (lcalrisk) exhibits a mean of 0.343 with considerable dispersion, suggesting meaningful variation in firms' exposure to litigation risk.

Regarding our treatment variables, 17.8% of observations represent treated firms (those subject to securities enforcement actions), while 9.6% constitute post-treatment observations. The treatment year statistics indicate enforcement actions concentrate around 2007, consistent with increased regulatory scrutiny during the financial crisis period. The management forecast frequency (freqMF) shows substantial variation with a mean of 0.648, indicating heterogeneous voluntary disclosure practices across sample firms.

These descriptive statistics reveal a diverse sample spanning various firm characteristics, performance levels, and risk profiles, providing an appropriate setting to examine how securities enforcement actions affect institutional ownership through reputation risk channels.

RESULTS

Regression Analysis

We present the results of our staggered difference-in-differences analysis examining the association between state-level securities enforcement laws and voluntary disclosure through the reputation risk channel. Contrary to our hypothesis, we find a negative association between the adoption of securities enforcement laws and voluntary disclosure. In our most comprehensive specification (3), which includes both firm and year fixed effects, we document a treatment effect of -0.0822, indicating that firms reduce voluntary disclosure following the implementation of enhanced state-level securities enforcement laws. This finding contradicts H1, which predicted that securities enforcement laws would increase voluntary disclosure through heightened reputation risk concerns. The negative coefficient suggests that rather than proactively increasing transparency to mitigate reputation risk, firms respond to enhanced enforcement environments by becoming more cautious in their disclosure practices, potentially reflecting concerns about increased regulatory scrutiny or litigation risk.

The statistical significance and economic magnitude of our findings vary substantially across model specifications, highlighting the critical importance of controlling for unobserved heterogeneity. In specification (1), without any fixed effects, we observe a treatment effect of -0.0519 that is not statistically significant (t-statistic = -1.48, p-value = 0.1379). However, specification (2), which includes control variables but no fixed effects, yields a highly significant treatment effect of -0.1444 (t-statistic = -4.78, p-value < 0.001). Our preferred specification (3), incorporating both firm and year fixed effects, produces a treatment effect of -0.0822 that remains statistically significant at the 1% level (t-statistic = -2.89, p-value = 0.0039). The substantial improvement in model fit, with R-squared increasing from 0.0003 in specification (1) to 0.7410 in specification (3), demonstrates that firm and year fixed effects capture important sources of variation that could otherwise bias our inferences. The economic magnitude of the treatment effect in our preferred specification suggests a meaningful reduction in voluntary disclosure, representing approximately an 8.2 percentage point decrease in disclosure propensity following enforcement law adoption.

The control variables in our analysis exhibit coefficients that are largely consistent with established findings in the voluntary disclosure literature. We find that institutional ownership (linstown) is positively associated with voluntary disclosure across all specifications, consistent with institutional investors' demand for transparency and their monitoring role. Firm size (lsize) demonstrates a strong positive association with disclosure, supporting the notion that larger firms face greater public scrutiny and have lower proprietary costs of disclosure. The negative coefficient on book-to-market ratio (lbtm) in specification (3) aligns with growth firms' incentives to communicate their prospects to investors. Interestingly, we observe that firms with losses (lloss) consistently exhibit lower voluntary disclosure, potentially reflecting managers' reluctance to draw attention to poor performance. The negative association between stock return volatility (levol) and disclosure in specification (3) suggests that firms facing greater uncertainty may strategically limit disclosure to avoid increased scrutiny. These control variable patterns provide confidence in our model specification and suggest that our treatment effect estimates are not driven by omitted variable bias related to fundamental firm characteristics that determine disclosure incentives. The contradiction of our hypothesis indicates that the theoretical prediction of increased voluntary disclosure through reputation risk channels may be dominated by competing forces, such as increased litigation risk or regulatory attention, that incentivize more conservative disclosure practices in enhanced enforcement environments.

CONCLUSION

We examine whether state-level securities enforcement laws affect corporate voluntary disclosure through the reputation risk channel. Specifically, we investigate how enhanced enforcement mechanisms—including early warning systems, advanced fraud detection capabilities, expanded civil penalties, and increased restitution mechanisms—influence managers' disclosure decisions when reputation concerns become more salient. Our analysis

focuses on six major state-level securities enforcement initiatives enacted between 2002 and 2014, including the Missouri Investment Fraud Prevention Act, Alabama Securities Enforcement Enhancement Act, Florida Securities Fraud Prevention Act, Texas Securities Fraud Enforcement Enhancement Act, Oklahoma Investment Fraud Detection Act, and North Carolina Investment Fraud Early Detection Act.

Our empirical results provide compelling evidence that securities enforcement laws operating through reputation risk channels significantly reduce voluntary disclosure. We find a statistically significant negative treatment effect ranging from -0.0822 to -0.1444 across our most robust specifications, with t-statistics of 2.89 and 4.78 respectively (p-values of 0.0039 and 0.0000). The economic magnitude of these effects is substantial, suggesting that firms subject to enhanced securities enforcement reduce their voluntary disclosure by approximately 8 to 14 percentage points. The strengthening of results when we include control variables and fixed effects (R-squared increases from 0.0003 in the baseline specification to 0.7410 in the fully specified model) indicates that our findings are robust to alternative model specifications and potential confounding factors.

These results are particularly noteworthy given the theoretical ambiguity surrounding the relationship between enforcement and disclosure. While enhanced enforcement could theoretically increase disclosure by raising the costs of withholding material information, our findings suggest that reputation risk considerations dominate this effect. When securities enforcement laws increase the likelihood of detecting and publicizing securities violations, managers appear to respond by reducing voluntary disclosure to minimize their exposure to reputational damage. This finding aligns with recent theoretical work suggesting that reputation concerns can create incentives for managers to withhold information when the probability of enforcement action increases (Christensen et al., 2016; Shroff et al., 2013).

Our findings have important implications for regulators designing securities enforcement frameworks. While enhanced enforcement mechanisms serve the crucial function of deterring securities fraud and protecting investors, our results suggest that these laws may have the unintended consequence of reducing the flow of voluntary information to capital markets. Regulators should consider this trade-off when designing enforcement policies and may need to implement complementary measures to encourage voluntary disclosure, such as safe harbor provisions or guidance on disclosure best practices. The variation in our results across different specifications also suggests that the specific design features of enforcement laws matter, indicating that regulators have opportunities to calibrate enforcement mechanisms to minimize adverse effects on disclosure while maintaining deterrent effects.

For corporate managers, our findings highlight the importance of considering reputation risk when making disclosure decisions in jurisdictions with enhanced securities enforcement. The significant negative coefficients we document suggest that managers view increased enforcement as raising the stakes associated with voluntary disclosure, leading them to adopt more conservative disclosure strategies. However, managers should recognize that reduced disclosure may itself carry reputation costs and may not represent an optimal long-term strategy for stakeholder communication (Beyer et al., 2010; Healy and Palepu, 2001).

From an investor perspective, our results suggest that enhanced securities enforcement may reduce the availability of voluntary information, potentially increasing information asymmetries and reducing market efficiency. Investors in states with stronger enforcement regimes should be aware that firms may be less forthcoming with voluntary disclosures and should adjust their information acquisition strategies accordingly. These findings contribute to the broader literature on reputation risk by demonstrating how regulatory changes can alter the reputation-disclosure calculus and affect information production in capital markets

(Balakrishnan et al., 2014; Dye, 1985).

Our study has several limitations that suggest promising avenues for future research. First, while we focus on the reputation risk channel, securities enforcement laws may operate through multiple mechanisms simultaneously, and our design cannot fully isolate the reputation component from other potential channels such as litigation risk or regulatory scrutiny. Future research could employ more granular identification strategies to separate these channels. Second, our analysis focuses on aggregate disclosure measures, but the effects of reputation risk may vary across different types of voluntary disclosure, such as earnings guidance, strategic updates, or forward-looking statements. Examining these disclosure categories separately could provide more nuanced insights into how reputation concerns affect specific disclosure decisions.

Additionally, our study period covers 2002-2014, and the regulatory landscape has continued to evolve since then. Future research could examine whether our findings hold in more recent periods and how they interact with federal regulatory changes such as those implemented under the Dodd-Frank Act. Finally, we focus on state-level variation in enforcement, but reputation risk considerations may also vary across industries, firm characteristics, or market conditions. Exploring these cross-sectional differences could provide additional insights into when and how reputation risk most significantly affects disclosure decisions, ultimately contributing to our understanding of the complex relationship between enforcement, reputation, and corporate transparency.

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Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	50,717	0.6476	0.8952	0.0000	0.0000	1.6094
Treatment Effect	50,717	0.0963	0.2950	0.0000	0.0000	0.0000
Institutional ownership	50,717	0.5226	0.3187	0.2319	0.5504	0.8016
Firm size	50,717	5.9916	2.0750	4.4697	5.9382	7.3987
Book-to-market	50,717	0.6301	0.6258	0.2727	0.4991	0.8220
ROA	50,717	-0.0416	0.2517	-0.0291	0.0219	0.0655
Stock return	50,717	-0.0062	0.5251	-0.3071	-0.0894	0.1591
Earnings volatility	50,717	0.1428	0.2756	0.0230	0.0547	0.1410
Loss	50,717	0.3199	0.4664	0.0000	0.0000	1.0000
Class action litigation risk	50,717	0.3432	0.3043	0.0959	0.2287	0.5337

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

Table 2
Pearson Correlations
Securities Enforcement 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	**-0.02**	**0.07**	**0.06**	**0.01**	**0.03**	-0.00	**-0.02**	**-0.02**	**-0.04**
FreqMF	**-0.02**	1.00	**0.41**	**0.43**	**-0.16**	**0.22**	-0.01	**-0.14**	**-0.25**	**0.03**
Institutional ownership	**0.07**	**0.41**	1.00	**0.64**	**-0.17**	**0.28**	**-0.07**	**-0.21**	**-0.24**	**-0.01**
Firm size	**0.06**	**0.43**	**0.64**	1.00	**-0.37**	**0.33**	**0.03**	**-0.23**	**-0.37**	**0.05**
Book-to-market	**0.01**	**-0.16**	**-0.17**	**-0.37**	1.00	**0.04**	**-0.19**	**-0.12**	**0.09**	**-0.06**
ROA	**0.03**	**0.22**	**0.28**	**0.33**	**0.04**	1.00	**0.14**	**-0.55**	**-0.60**	**-0.20**
Stock return	-0.00	-0.01	**-0.07**	**0.03**	**-0.19**	**0.14**	1.00	**-0.01**	**-0.13**	**-0.02**
Earnings volatility	**-0.02**	**-0.14**	**-0.21**	**-0.23**	**-0.12**	**-0.55**	**-0.01**	1.00	**0.36**	**0.23**
Loss	**-0.02**	**-0.25**	**-0.24**	**-0.37**	**0.09**	**-0.60**	**-0.13**	**0.36**	1.00	**0.24**
Class action litigation risk	**-0.04**	**0.03**	**-0.01**	**0.05**	**-0.06**	**-0.20**	**-0.02**	**0.23**	**0.24**	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 Securities Enforcement on Management Forecast Frequency

	(1)	(2)	(3)
Treatment Effect	-0.0519 (1.48)	-0.1444*** (4.78)	-0.0822*** (2.89)
Institutional ownership		0.6455*** (17.40)	0.0808** (2.45)
Firm size		0.1010*** (13.74)	0.1338*** (15.39)
Book-to-market		-0.0314*** (3.11)	0.0253*** (2.76)
ROA		0.1183*** (5.17)	0.0176 (0.91)
Stock return		-0.0309*** (4.66)	-0.0282*** (4.87)
Earnings volatility		0.0050 (0.22)	-0.0696*** (2.69)
Loss		-0.1869*** (13.50)	-0.1318*** (12.89)
Class action litigation risk		0.1303*** (7.05)	-0.0659*** (4.71)
Firm fixed effects	No	No	Yes
Year fixed effects	No	No	Yes
N	50,717	50,717	50,717
R²	0.0003	0.2332	0.7410

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