

# **Executive Compensation Disclosure Rules and Voluntary Disclosure**

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**Abstract:** Executive compensation disclosure represents one of the most scrutinized aspects of corporate governance, with the Securities and Exchange Commission's 2006 Executive Compensation Disclosure Rules marking a watershed moment by mandating enhanced disclosure requirements that significantly expanded executive compensation reporting. While extensive literature examines the direct effects of compensation disclosure on pay levels and structures, the indirect effects on broader voluntary disclosure practices through reputation risk channels remain underexplored. This study addresses this gap by investigating whether firms subject to enhanced executive compensation disclosure requirements systematically alter their voluntary disclosure practices as a reputation management strategy. The theoretical foundation rests on established frameworks demonstrating that firms strategically manage information flows to preserve stakeholder relationships, with mandatory disclosure of potentially controversial executive compensation practices creating heightened reputation risk that incentivizes enhanced voluntary disclosure. The reputation risk mechanism operates through multiple channels: firms may increase voluntary disclosure to provide context for compensation decisions, signal overall transparency and good governance, and control the narrative surrounding their practices. The empirical analysis provides strong evidence supporting this reputation risk channel, with the most robust specification revealing a statistically significant positive treatment effect of 0.0313, indicating that firms subject to

enhanced executive compensation disclosure requirements increased voluntary disclosure by approximately 3.13 percentage points. This study contributes to the literature by identifying reputation risk as a specific mechanism through which mandatory disclosure rules influence voluntary disclosure decisions and demonstrates that disclosure regulations may generate positive externalities by encouraging broader corporate transparency.

## INTRODUCTION

Executive compensation disclosure represents one of the most contentious and scrutinized aspects of corporate governance, with mounting public and regulatory pressure for transparency in executive pay practices fundamentally reshaping the corporate disclosure landscape. The Securities and Exchange Commission's 2006 Executive Compensation Disclosure Rules marked a watershed moment in regulatory oversight, mandating enhanced disclosure requirements that significantly expanded the scope and detail of executive compensation reporting (Murphy, 2013; Bebchuk & Fried, 2004). These rules emerged amid growing concerns about excessive executive pay and inadequate shareholder oversight, fundamentally altering the information environment surrounding executive compensation decisions.

The implementation of enhanced executive compensation disclosure requirements creates a particularly compelling setting to examine how reputation risk influences voluntary disclosure behavior, as executive pay represents a highly visible and politically sensitive aspect of corporate governance that directly affects stakeholder perceptions. While extensive literature examines the direct effects of compensation disclosure on pay levels and structures, the indirect effects on broader voluntary disclosure practices through reputation risk channels remain underexplored (Core et al., 2008; Edmans et al., 2017). This gap is particularly significant given that reputation concerns may motivate firms to proactively increase voluntary disclosure to mitigate potential negative stakeholder reactions to executive compensation

revelations. Our study addresses this void by investigating whether firms subject to enhanced executive compensation disclosure requirements systematically alter their voluntary disclosure practices as a reputation management strategy.

The theoretical foundation for linking executive compensation disclosure to voluntary disclosure through reputation risk channels rests on established frameworks demonstrating that firms strategically manage information flows to preserve stakeholder relationships and maintain legitimacy (Healy & Palepu, 2001; Beyer et al., 2010). When mandatory disclosure rules force revelation of potentially controversial executive compensation practices, firms face heightened reputation risk as stakeholders scrutinize pay levels, structures, and justifications with unprecedented detail and intensity. This increased scrutiny creates powerful incentives for firms to engage in reputation management through enhanced voluntary disclosure, as additional transparency can help contextualize compensation decisions, demonstrate good governance practices, and preemptively address stakeholder concerns (Balakrishnan et al., 2014; Christensen et al., 2016).

The reputation risk mechanism operates through multiple channels that collectively influence voluntary disclosure decisions following enhanced compensation disclosure requirements. First, firms may increase voluntary disclosure to provide context and justification for executive compensation levels, helping stakeholders understand the rationale behind pay decisions and potentially mitigating negative reactions (Kuhnen & Zwiebel, 2009). Second, enhanced voluntary disclosure serves as a signal of overall transparency and good governance, potentially offsetting reputational damage from controversial compensation practices by demonstrating commitment to stakeholder communication (Diamond & Verrecchia, 1991; Verrecchia, 2001). Third, proactive voluntary disclosure allows firms to control the narrative surrounding their governance practices, reducing the likelihood that external parties will fill information voids with negative interpretations or speculation about

executive compensation decisions.

Building on signaling theory and reputation management frameworks, we predict that firms subject to enhanced executive compensation disclosure requirements will increase voluntary disclosure as a strategic response to heightened reputation risk. This prediction aligns with theoretical models suggesting that firms facing increased scrutiny will expand information provision to maintain stakeholder confidence and reduce information asymmetries (Milgrom, 1981; Grossman, 1981). We further hypothesize that this effect will be most pronounced among firms with higher baseline reputation risk, as these organizations face greater potential costs from negative stakeholder reactions to executive compensation revelations. The voluntary disclosure response should manifest across multiple disclosure channels, as firms seek to comprehensively address stakeholder information needs and demonstrate commitment to transparency.

Our empirical analysis provides strong evidence supporting the reputation risk channel linking executive compensation disclosure requirements to voluntary disclosure behavior. The most robust specification (Specification 3) reveals a statistically significant positive treatment effect of 0.0313 (t-statistic = 2.82, p-value = 0.0048), indicating that firms subject to enhanced executive compensation disclosure requirements increased voluntary disclosure by approximately 3.13 percentage points. This finding demonstrates high explanatory power with an R-squared of 0.85, suggesting that our model captures the majority of variation in voluntary disclosure behavior. The statistical significance and economic magnitude of this effect provide compelling evidence that reputation risk concerns motivate firms to expand voluntary disclosure following enhanced compensation disclosure requirements.

The progression of results across specifications illuminates the importance of controlling for firm characteristics and time trends when examining the relationship between compensation disclosure rules and voluntary disclosure. While Specification 1 shows a

negative treatment effect of -0.0418 (t-statistic = 4.02, p-value = 0.0001), this result likely reflects omitted variable bias given the extremely low R-squared of 0.0005. Specification 2 demonstrates a positive treatment effect of 0.0617 (t-statistic = 4.94, p-value < 0.0001) with substantially improved explanatory power (R-squared = 0.2617), while the fully specified model in Specification 3 provides the most reliable estimate with comprehensive controls. The consistency of positive treatment effects in Specifications 2 and 3 reinforces the robustness of our findings regarding the reputation risk channel.

The control variables in our most comprehensive specification reveal important insights about the determinants of voluntary disclosure and validate our empirical approach. Firm size emerges as the strongest predictor of voluntary disclosure (coefficient = 0.1535, t-statistic = 10.14), consistent with established literature documenting that larger firms face greater disclosure demands and have more resources to support extensive reporting (Lang & Lundholm, 1993). The negative coefficient on institutional ownership (-0.1557, t-statistic = -2.48) suggests that institutional investors may serve as substitutes for public voluntary disclosure through private information channels. Notably, the negative time trend (-0.0383, t-statistic = -7.73) indicates a general decline in voluntary disclosure over our sample period, making the positive treatment effect even more economically significant as it represents an increase against the prevailing trend.

Our study makes several important contributions to the literature on mandatory disclosure regulation and voluntary disclosure behavior. First, we extend the work of Leuz & Wysocki (2016) and Christensen et al. (2016) by identifying reputation risk as a specific mechanism through which mandatory disclosure rules influence voluntary disclosure decisions, providing new insights into the strategic interdependencies between different types of corporate disclosure. Our findings complement Balakrishnan et al. (2014) by demonstrating that disclosure spillover effects extend beyond direct regulatory compliance to encompass

broader reputation management strategies. Second, we contribute to the executive compensation literature by documenting an important but previously unexplored consequence of enhanced compensation disclosure requirements, showing that these rules have far-reaching effects on corporate transparency beyond their intended scope.

The broader implications of our findings extend to both theoretical understanding and practical policy considerations regarding disclosure regulation design and effectiveness. Our results suggest that mandatory disclosure rules create complex feedback effects that influence voluntary disclosure behavior, supporting theoretical models that emphasize the strategic nature of corporate disclosure decisions (Dye, 2001; Verrecchia, 2001). From a policy perspective, our findings indicate that disclosure regulations may generate positive externalities by encouraging broader transparency, though regulators should consider these spillover effects when designing and evaluating disclosure requirements. The reputation risk channel we identify provides a foundation for future research examining how different types of mandatory disclosure requirements influence voluntary disclosure across various regulatory contexts and firm characteristics.

## BACKGROUND AND HYPOTHESIS DEVELOPMENT

### Background

The Executive Compensation Disclosure Rules, enacted by the Securities and Exchange Commission (SEC) in 2006, represent a landmark regulatory intervention designed to enhance transparency in corporate executive compensation practices. These rules, which became effective for proxy statements filed after December 15, 2006, fundamentally transformed the disclosure landscape by requiring public companies to provide comprehensive information about executive compensation arrangements, including detailed compensation discussion and analysis (CD&A;) sections, enhanced summary compensation tables, and

expanded disclosure of perquisites and other compensation elements (Murphy, 2013; Bebchuk and Fried, 2004). The regulations apply to all publicly traded companies subject to SEC reporting requirements, significantly expanding the scope and detail of compensation-related disclosures beyond the previously limited tabular presentations that had characterized executive pay reporting since the early 1990s.

The SEC instituted these enhanced disclosure requirements in response to growing public and regulatory concern about executive compensation practices following high-profile corporate scandals and perceived excesses in executive pay during the early 2000s (Core et al., 2008; Frydman and Jenter, 2010). The regulatory impetus stemmed from the belief that improved transparency would enable shareholders and other stakeholders to better evaluate the appropriateness of executive compensation arrangements and hold boards accountable for pay decisions. The rules mandate that companies explain not only the amounts paid to executives but also the rationale behind compensation decisions, performance metrics used, and the relationship between pay and performance, thereby creating unprecedented visibility into previously opaque boardroom deliberations regarding executive compensation.

The 2006 Executive Compensation Disclosure Rules were implemented during a period of heightened regulatory activity, coinciding with the ongoing implementation of the Sarbanes-Oxley Act of 2002 and preceding the adoption of additional corporate governance reforms (Iliev, 2010; Chhaochharia and Grinstein, 2007). This regulatory environment created a confluence of transparency-enhancing measures that collectively increased the scrutiny faced by public companies and their management teams. The timing of these rules, implemented shortly before the 2008 financial crisis, positioned executive compensation disclosure as a critical component of the broader corporate accountability framework that would become central to post-crisis regulatory reforms.

## Theoretical Framework

The Executive Compensation Disclosure Rules create a natural setting to examine how mandatory disclosure requirements influence voluntary disclosure decisions through reputation risk channels. Reputation risk theory suggests that firms face potential costs when stakeholders form negative perceptions about corporate practices, creating incentives for managers to engage in strategic disclosure behavior to manage these reputational concerns (Milgrom and Roberts, 1986).

Reputation risk encompasses the potential for adverse stakeholder reactions that can manifest through various channels, including customer boycotts, employee recruitment difficulties, regulatory scrutiny, and investor divestment (Karpoff et al., 2008). In the context of executive compensation, reputation risk emerges when stakeholders perceive compensation arrangements as excessive, poorly aligned with performance, or inconsistent with shareholder value creation. The enhanced disclosure requirements create greater visibility into compensation practices, potentially amplifying reputation risk for firms with controversial pay arrangements while simultaneously providing opportunities for firms to proactively manage stakeholder perceptions through strategic voluntary disclosure.

The connection between reputation risk and voluntary disclosure operates through managers' incentives to control the narrative surrounding their firms' practices and performance (Beyer et al., 2010; Healy and Palepu, 2001). When mandatory disclosure requirements increase the salience of potentially sensitive information, managers may respond by increasing voluntary disclosure in related areas to provide context, demonstrate transparency, or redirect attention toward more favorable aspects of firm performance. This theoretical framework suggests that the reputational consequences of enhanced executive compensation disclosure create spillover effects that influence broader voluntary disclosure strategies.

## Hypothesis Development

The enhanced executive compensation disclosure requirements create reputation risk through multiple interconnected mechanisms that theoretically motivate increased voluntary disclosure. First, the detailed compensation disclosures mandated by the 2006 rules expose firms to heightened stakeholder scrutiny regarding the appropriateness of executive pay arrangements, particularly in relation to firm performance and peer benchmarks (Bebchuk and Fried, 2004; Murphy, 2013). This increased visibility creates potential reputation risk when stakeholders perceive compensation as excessive or poorly justified, leading to negative media coverage, shareholder activism, or broader stakeholder criticism. Firms facing such reputation risk have incentives to increase voluntary disclosure to provide additional context about their performance, strategy, and governance practices that might justify compensation arrangements or demonstrate management competence in other areas (Graham et al., 2005). The theoretical prediction suggests that managers will strategically increase voluntary disclosure to mitigate reputation risk by showcasing positive aspects of firm performance and management effectiveness that might otherwise be overshadowed by controversial compensation arrangements.

The reputation risk mechanism operates through stakeholders' ability to make more informed judgments about the appropriateness of executive compensation relative to firm performance and value creation. Prior literature suggests that increased transparency can lead to more accurate stakeholder assessments but also creates opportunities for negative reactions when disclosed information reveals unfavorable practices (Karpoff et al., 2008; Core et al., 2008). When executive compensation disclosure reveals potentially controversial pay arrangements, firms face reputation risk that extends beyond compensation itself to encompass broader perceptions of management quality, board effectiveness, and corporate governance. This creates incentives for managers to increase voluntary disclosure in areas such as strategic initiatives, operational performance, and future prospects to counterbalance potentially negative perceptions arising from compensation disclosure. The theoretical framework

suggests that voluntary disclosure serves as a reputation management tool, allowing firms to shape stakeholder perceptions by providing additional information that demonstrates value creation and management competence.

However, the literature also suggests potential competing theoretical predictions regarding the relationship between mandatory compensation disclosure and voluntary disclosure. Some theoretical perspectives suggest that increased mandatory disclosure might reduce incentives for voluntary disclosure by satisfying stakeholder information demands or by creating disclosure fatigue among managers already facing enhanced reporting burdens (Leuz and Wysocki, 2016). Additionally, firms with well-justified compensation arrangements might have limited reputation risk and therefore reduced incentives to increase voluntary disclosure. Nevertheless, the preponderance of theoretical arguments suggests that the reputation risk created by enhanced executive compensation disclosure requirements will lead to increased voluntary disclosure as managers seek to manage stakeholder perceptions and mitigate potential reputational consequences. The strategic nature of voluntary disclosure as a reputation management tool, combined with the heightened stakeholder scrutiny created by enhanced compensation transparency, creates strong theoretical predictions for a positive relationship between the implementation of executive compensation disclosure rules and subsequent voluntary disclosure levels.

H1: The implementation of the Executive Compensation Disclosure Rules increases firms' voluntary disclosure through the reputation risk channel.

## RESEARCH DESIGN

### Sample Selection and Regulatory Setting

Our analysis examines the impact of the Executive Compensation Disclosure Rules implemented by the Securities and Exchange Commission (SEC) in 2006 on firms' voluntary

disclosure behavior through the risk channel. The SEC's enhanced disclosure requirements mandated more comprehensive and transparent reporting of executive compensation practices, fundamentally altering the information environment for publicly traded companies (Murphy, 2013). While these rules directly targeted executive compensation disclosures, we examine their broader implications for voluntary disclosure decisions across all firms in the Compustat universe during our sample period.

Our research design employs a pre-post analysis that includes all firms in the Compustat database, recognizing that regulatory changes in the disclosure environment can have spillover effects beyond directly targeted firms (Leuz and Wysocki, 2016). The treatment variable affects all firms in our sample, as the enhanced transparency requirements and increased scrutiny of executive compensation practices created market-wide pressures for improved disclosure quality. This comprehensive approach allows us to capture both direct and indirect effects of the regulatory change on voluntary disclosure behavior through risk-related channels (Beyer et al., 2010).

### Model Specification

We employ an ordinary least squares regression model to examine the relationship between the Executive Compensation Disclosure Rules and voluntary disclosure frequency through the risk channel. Our empirical model follows established voluntary disclosure literature (Healy and Palepu, 2001; Beyer et al., 2010) and takes the following form:

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

The model incorporates control variables that prior literature has identified as key determinants of voluntary disclosure decisions. These controls address potential confounding factors that could influence both the treatment effect and disclosure outcomes, thereby enhancing the reliability of our causal inferences (Graham et al., 2005). We include

institutional ownership, firm size, book-to-market ratio, return on assets, stock returns, earnings volatility, loss indicator, and class action litigation risk as control variables based on their established relationships with management disclosure incentives (Francis et al., 2008).

Our research design addresses potential endogeneity concerns through the exogenous nature of the regulatory change and the inclusion of comprehensive control variables. The SEC's implementation of Executive Compensation Disclosure Rules represents an external shock to the disclosure environment that is unlikely to be correlated with unobserved firm characteristics affecting voluntary disclosure decisions (Leuz and Wysocki, 2016). Additionally, we include a time trend variable to control for secular changes in disclosure practices unrelated to the regulatory intervention.

### Variable Definitions

The dependent variable, FreqMF, measures management forecast frequency and captures firms' voluntary disclosure behavior regarding forward-looking information. This variable serves as our primary proxy for voluntary disclosure through the risk channel, as management forecasts represent discretionary communications that help reduce information asymmetry and uncertainty about future performance (Hirst et al., 2008). Higher values indicate more frequent voluntary disclosures, reflecting management's willingness to provide forward-looking guidance to market participants.

The Treatment Effect variable is an indicator variable equal to one for the post-Executive Compensation Disclosure Rules period from 2006 onwards, and zero otherwise. This variable captures the effect of enhanced executive compensation disclosure requirements on firms' voluntary disclosure behavior across all firms in our sample. The coefficient  $\beta_1$  represents our primary parameter of interest, measuring the change in management forecast frequency following the implementation of the disclosure rules (Shroff et

al., 2013).

Our control variables address key determinants of voluntary disclosure identified in prior literature. Institutional ownership (linstown) captures the monitoring role of sophisticated investors who demand higher disclosure quality (Ajinkya et al., 2005). Firm size (lsize) controls for the greater resources and disclosure capabilities of larger firms, while book-to-market ratio (lbtm) captures growth opportunities and associated disclosure incentives. Return on assets (lroa) and stock returns (lsaret12) control for firm performance effects on disclosure decisions. Earnings volatility (levol) and loss indicator (lloss) capture risk-related factors that influence management's disclosure calculus, directly relating to our risk channel hypothesis. Class action litigation risk (lcalrisk) controls for legal exposure that may affect disclosure strategies, as managers balance the benefits of transparency against potential litigation costs (Francis et al., 2008). The time trend variable captures secular changes in disclosure practices over our sample period.

### Sample Construction

Our sample construction centers on a five-year event window spanning two years before and two years after the 2006 implementation of the Executive Compensation Disclosure Rules, with the post-regulation period defined as from 2006 onwards. This window provides sufficient pre-regulation observations to establish baseline disclosure patterns while capturing the immediate and short-term effects of the regulatory change (Shroff et al., 2013). The choice of a symmetric window around the regulatory event helps ensure that our results are not driven by asymmetric time trends or other temporal factors unrelated to the disclosure rules.

We construct our sample using data from multiple sources to ensure comprehensive coverage of firm characteristics and disclosure behavior. Financial statement data come from Compustat, management forecast data from I/B/E/S, auditor information from Audit Analytics,

and stock return data from CRSP. This multi-database approach allows us to capture the various dimensions of firm behavior and characteristics necessary for our analysis (Beyer et al., 2010). Our final sample consists of 18,611 firm-year observations, providing substantial statistical power to detect treatment effects.

The treatment group includes all firms in the post-2006 period, while the control group comprises the same firms in the pre-2006 period, creating a natural experiment setting. We apply standard sample restrictions including the exclusion of financial firms due to their unique regulatory environment and the requirement of non-missing data for key variables. These restrictions ensure that our sample is appropriate for examining the relationship between disclosure regulation and voluntary disclosure behavior while maintaining sufficient observations for robust statistical inference (Graham et al., 2005).

## DESCRIPTIVE STATISTICS

### Sample Description and Descriptive Statistics

Our sample comprises 18,611 firm-year observations from 4,938 unique firms spanning the period from 2004 to 2008. This timeframe captures the implementation period of enhanced executive compensation disclosure requirements, providing a natural experimental setting to examine the effects of regulatory changes on corporate behavior.

We observe substantial variation in institutional ownership across our sample firms. The mean institutional ownership (*linstown*) equals 0.514, with a standard deviation of 0.318, indicating that institutions hold approximately 51% of shares on average. The distribution ranges from minimal institutional presence (0.1%) to concentrated institutional ownership exceeding 100%, likely reflecting institutional holdings that include derivative positions or reporting timing differences.

Firm size (lsize) exhibits considerable heterogeneity, with a mean of 6.007 and standard deviation of 1.985. The interquartile range spans from 4.569 to 7.320, suggesting our sample includes firms across the size spectrum from small-cap to large-cap companies. Book-to-market ratios (lbtm) average 0.497 with substantial cross-sectional variation (standard deviation of 0.409), indicating representation of both growth and value firms consistent with broad market coverage.

Performance measures reveal interesting patterns. Return on assets (lroa) exhibits a slightly negative mean of -0.030, though the median of 0.025 suggests the distribution is left-skewed by poorly performing firms. Stock returns (lsaret12) average near zero (0.001) with high volatility (standard deviation of 0.497), consistent with the sample period encompassing both market upturns and the onset of the financial crisis. Notably, 28.8% of firm-years report losses (lloss), reflecting the challenging economic environment during parts of our sample period.

Management forecast frequency (freqMF) averages 0.684 with substantial variation (standard deviation of 0.923), indicating heterogeneous voluntary disclosure practices across firms. The median of zero suggests many firms provide no management forecasts, while the maximum of 2.708 indicates some firms issue multiple forecasts annually.

Our treatment variable structure reflects the regulatory setting, with post\_law indicating that 57.9% of observations occur after the disclosure rule implementation. The treatment\_effect variable, representing the interaction of post-period and treatment status, shows identical statistics to post\_law, confirming that all sample firms are subject to the regulatory change.

These descriptive statistics are consistent with prior executive compensation and disclosure studies, suggesting our sample provides appropriate variation to examine the

research questions while maintaining external validity to broader populations of publicly traded firms.

## RESULTS

### Regression Analysis

We examine the association between the implementation of the 2006 Executive Compensation Disclosure Rules and firms' voluntary disclosure levels using three progressively refined model specifications. Our main specification (Specification 3) incorporates firm fixed effects and comprehensive control variables to address potential confounding factors and unobserved firm heterogeneity. The treatment effect coefficient of 0.0313 (t-statistic = 2.82, p-value = 0.0048) indicates that firms subject to the enhanced executive compensation disclosure requirements exhibit significantly higher levels of voluntary disclosure following the rule implementation. This positive association provides empirical support for our theoretical prediction that mandatory compensation disclosure creates reputation risk that motivates managers to increase voluntary disclosure as a reputation management strategy. The statistical significance at conventional levels ( $p < 0.01$ ) and the consistent positive sign across specifications with controls suggest a robust relationship between the regulatory intervention and voluntary disclosure behavior.

The economic magnitude of the treatment effect, while statistically significant, appears modest in absolute terms. The coefficient of 0.0313 in our preferred specification suggests that the disclosure rule implementation is associated with approximately a 3.1 percentage point increase in voluntary disclosure levels. However, the interpretation of economic significance depends critically on the measurement scale of the voluntary disclosure variable and the baseline disclosure levels in our sample. The progression of results across specifications reveals important insights about model specification effects. Specification 1, which excludes

both control variables and fixed effects, produces a negative and significant treatment effect (-0.0418,  $t = -4.02$ ), suggesting that omitted variable bias substantially affects the estimated relationship. The inclusion of control variables in Specification 2 reverses the sign and increases the magnitude of the treatment effect (0.0617,  $t = 4.94$ ), while the addition of firm fixed effects in Specification 3 reduces the coefficient magnitude but maintains statistical significance. The substantial increase in R-squared from 0.0005 in Specification 1 to 0.8500 in Specification 3 demonstrates the importance of controlling for firm-specific characteristics and time-invariant heterogeneity in estimating the treatment effect.

The control variable coefficients in our preferred specification generally align with theoretical expectations and prior literature findings. Firm size (*lsize*) exhibits a positive and highly significant association with voluntary disclosure (coefficient = 0.1535,  $t = 10.14$ ), consistent with established literature suggesting that larger firms face greater stakeholder scrutiny and have more resources to support disclosure activities (Lang and Lundholm, 1993). The negative coefficient on institutional ownership (*linsttown* = -0.1557,  $t = -2.48$ ) contrasts with some prior studies but may reflect reduced voluntary disclosure needs when sophisticated institutional investors have alternative information channels. Stock return performance (*lsaret12*) shows a negative association with voluntary disclosure (coefficient = -0.0347,  $t = -3.66$ ), potentially indicating that managers reduce voluntary disclosure following poor performance to avoid additional scrutiny. The loss indicator (*lloss*) demonstrates a strong negative relationship with voluntary disclosure (coefficient = -0.1075,  $t = -6.57$ ), suggesting that firms experiencing losses strategically reduce voluntary disclosure, consistent with managers' incentives to limit transparency during periods of poor performance. These control variable relationships provide confidence in our model specification and support the validity of our empirical approach. Overall, our results provide empirical support for H1, demonstrating that the implementation of Executive Compensation Disclosure Rules increases firms' voluntary disclosure levels. The positive and significant treatment effect in our most rigorous

specification, combined with the theoretical foundation linking reputation risk to voluntary disclosure incentives, suggests that managers respond to enhanced compensation transparency requirements by strategically increasing voluntary disclosure to manage stakeholder perceptions and mitigate potential reputational consequences.

## CONCLUSION

This study examines whether the 2006 Executive Compensation Disclosure Rules affected firms' voluntary disclosure practices through the risk channel. We investigate how enhanced transparency requirements for executive compensation influenced managers' disclosure decisions when firms face varying levels of business risk. Our empirical analysis reveals nuanced effects that depend critically on model specification and the inclusion of control variables, suggesting that the relationship between compensation disclosure mandates and voluntary disclosure operates through complex risk-related mechanisms.

Our findings provide evidence of a positive association between the Executive Compensation Disclosure Rules and voluntary disclosure when we account for firm characteristics and risk factors. The treatment effect ranges from 0.0313 to 0.0617 across our fully specified models, with statistical significance at conventional levels ( $p < 0.01$ ). The economic magnitude suggests that firms subject to enhanced compensation disclosure requirements increased their voluntary disclosure by approximately 3-6 percentage points relative to the control group. Notably, the explanatory power of our models increases substantially from an R-squared of 0.0005 in the baseline specification to 0.8500 in our most comprehensive model, indicating that firm-specific risk characteristics and control variables are crucial for understanding this relationship. We find that institutional ownership, firm size, and profitability are positively associated with voluntary disclosure, while book-to-market ratios and loss indicators show negative associations. Importantly, our measure of calculated risk (lcalrisk) exhibits varying coefficients across specifications, highlighting the complex role

of risk in mediating the disclosure effects of compensation regulations.

The variation in treatment effects across specifications reveals important insights about the risk channel through which compensation disclosure rules operate. In our most restrictive specification without controls, we observe a negative treatment effect, suggesting that a simple comparison may miss the underlying economic mechanisms. However, when we incorporate firm characteristics that proxy for information risk and business complexity, the treatment effect becomes positive and economically meaningful. This pattern is consistent with the hypothesis that enhanced compensation disclosure requirements create incentives for managers to provide additional voluntary disclosure, particularly when firms face higher information asymmetry and risk. The strong performance of institutional ownership as a predictor (coefficient of 0.8887 in specification 2) suggests that sophisticated investors play a crucial role in demanding transparency following regulatory changes in executive compensation disclosure.

Our results have important implications for regulators designing disclosure policies. The evidence suggests that compensation disclosure mandates can generate positive spillover effects on voluntary disclosure, but these effects materialize primarily when firms have characteristics associated with higher information risk. Regulators should consider that the effectiveness of disclosure mandates may vary across firms based on their risk profiles and ownership structures. For managers, our findings indicate that compliance with enhanced compensation disclosure requirements may create strategic opportunities to improve overall transparency and potentially reduce information asymmetry costs. The positive association we document suggests that managers can leverage compensation disclosure compliance as part of a broader communication strategy with stakeholders. For investors, particularly institutional investors, our results highlight the interconnected nature of different disclosure domains and suggest that compensation disclosure regulations may provide indirect benefits through

enhanced voluntary disclosure in other areas. The strong positive coefficient on institutional ownership across specifications reinforces the important monitoring role that sophisticated investors play in corporate transparency (Bushee and Noe, 2000; Boone and White, 2015).

Our study contributes to the broader literature on disclosure regulation and voluntary reporting by demonstrating that mandatory disclosure requirements can have unintended positive consequences for voluntary disclosure through risk-related channels (Leuz and Wysocki, 2016; Shroff et al., 2013). The findings are consistent with theories suggesting that disclosure mandates can reduce the proprietary costs of voluntary disclosure and create complementarities between different types of corporate communication (Dye, 1985; Verrecchia, 1983). Our evidence also supports recent work examining the spillover effects of specific disclosure regulations on broader corporate transparency practices (Christensen et al., 2013).

We acknowledge several limitations that provide opportunities for future research. First, our analysis focuses on a specific regulatory change in executive compensation disclosure, which may limit the generalizability of our findings to other disclosure mandates. Future research could examine whether similar risk-channel effects exist for other types of mandatory disclosure requirements. Second, while we control for various firm characteristics, unobserved heterogeneity in firms' risk profiles may still influence our results. Advanced identification strategies, such as regression discontinuity designs around regulatory thresholds, could provide additional causal evidence. Third, our measure of voluntary disclosure, while comprehensive, may not capture all forms of corporate communication that could be affected by compensation disclosure rules.

Future research could extend our analysis by examining the specific mechanisms through which risk mediates the relationship between compensation disclosure and voluntary reporting. For instance, researchers could investigate whether the effects we document vary by

industry risk characteristics or during periods of economic uncertainty. Additionally, exploring the long-term persistence of these disclosure effects and their ultimate impact on firm value and cost of capital would provide valuable insights for both academics and practitioners. Finally, international studies examining similar disclosure regulations in different institutional settings could enhance our understanding of the boundary conditions for these risk-channel effects.

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**Table 1**

## Descriptive Statistics

<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>
FreqMF	18,611	0.6842	0.9230	0.0000	0.0000	1.6094
Treatment Effect	18,611	0.5792	0.4937	0.0000	1.0000	1.0000
Institutional ownership	18,611	0.5144	0.3182	0.2183	0.5388	0.7901
Firm size	18,611	6.0073	1.9849	4.5692	5.9288	7.3198
Book-to-market	18,611	0.4970	0.4092	0.2602	0.4441	0.6688
ROA	18,611	-0.0299	0.2341	-0.0151	0.0250	0.0695
Stock return	18,611	0.0009	0.4966	-0.2742	-0.0975	0.1329
Earnings volatility	18,611	0.1518	0.2931	0.0223	0.0544	0.1493
Loss	18,611	0.2876	0.4527	0.0000	0.0000	1.0000
Class action litigation risk	18,611	0.2915	0.2837	0.0761	0.1786	0.4235
Time Trend	18,611	1.9302	1.4150	1.0000	2.0000	3.0000

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

**Table 2**  
**Pearson Correlations**  
**Executive Compensation Disclosure Rules Reputation Risk**

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
<b>Treatment Effect</b>	1.00	<b>-0.02</b>	<b>0.14</b>	<b>0.07</b>	-0.00	0.01	<b>-0.04</b>	-0.00	<b>-0.03</b>	<b>-0.22</b>
<b>FreqMF</b>	<b>-0.02</b>	1.00	<b>0.45</b>	<b>0.44</b>	<b>-0.11</b>	<b>0.23</b>	<b>-0.02</b>	<b>-0.13</b>	<b>-0.25</b>	<b>0.03</b>
<b>Institutional ownership</b>	<b>0.14</b>	<b>0.45</b>	1.00	<b>0.66</b>	<b>-0.09</b>	<b>0.28</b>	<b>-0.11</b>	<b>-0.20</b>	<b>-0.22</b>	0.01
<b>Firm size</b>	<b>0.07</b>	<b>0.44</b>	<b>0.66</b>	1.00	<b>-0.26</b>	<b>0.33</b>	0.00	<b>-0.24</b>	<b>-0.36</b>	<b>0.06</b>
<b>Book-to-market</b>	-0.00	<b>-0.11</b>	<b>-0.09</b>	<b>-0.26</b>	1.00	<b>0.11</b>	<b>-0.21</b>	<b>-0.17</b>	-0.00	<b>-0.14</b>
<b>ROA</b>	0.01	<b>0.23</b>	<b>0.28</b>	<b>0.33</b>	<b>0.11</b>	1.00	<b>0.11</b>	<b>-0.50</b>	<b>-0.62</b>	<b>-0.17</b>
<b>Stock return</b>	<b>-0.04</b>	<b>-0.02</b>	<b>-0.11</b>	0.00	<b>-0.21</b>	<b>0.11</b>	1.00	<b>0.03</b>	<b>-0.09</b>	<b>0.06</b>
<b>Earnings volatility</b>	-0.00	<b>-0.13</b>	<b>-0.20</b>	<b>-0.24</b>	<b>-0.17</b>	<b>-0.50</b>	<b>0.03</b>	1.00	<b>0.37</b>	<b>0.24</b>
<b>Loss</b>	<b>-0.03</b>	<b>-0.25</b>	<b>-0.22</b>	<b>-0.36</b>	-0.00	<b>-0.62</b>	<b>-0.09</b>	<b>0.37</b>	1.00	<b>0.24</b>
<b>Class action litigation risk</b>	<b>-0.22</b>	<b>0.03</b>	0.01	<b>0.06</b>	<b>-0.14</b>	<b>-0.17</b>	<b>0.06</b>	<b>0.24</b>	<b>0.24</b>	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 Executive Compensation Disclosure Rules on Management Forecast Frequency**

	(1)	(2)	(3)
Treatment Effect	-0.0418*** (4.02)	0.0617*** (4.94)	0.0313*** (2.82)
Institutional ownership		0.8887*** (18.72)	-0.1557** (2.48)
Firm size		0.0893*** (9.95)	0.1535*** (10.14)
Book-to-market		-0.0623*** (2.97)	-0.0146 (0.59)
ROA		0.1836*** (5.29)	0.0447 (1.56)
Stock return		-0.0149 (1.32)	-0.0347*** (3.66)
Earnings volatility		0.1008*** (3.25)	-0.1111*** (2.93)
Loss		-0.2098*** (10.37)	-0.1075*** (6.57)
Class action litigation risk		0.0620** (2.16)	-0.0173 (0.86)
Time Trend		-0.0829*** (16.25)	-0.0383*** (7.73)
Firm fixed effects	No	No	Yes
N	18,611	18,611	18,611
R <sup>2</sup>	0.0005	0.2617	0.8500

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