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 SEC's 2006 Executive Compensation Disclosure Rules creating unprecedented transparency requirements that fundamentally altered the information landscape surrounding executive pay practices. While prior literature extensively examines the direct effects of these disclosure rules on compensation levels and structures, limited research investigates how these regulations indirectly affect firms' broader voluntary disclosure strategies through unsophisticated investor channels. This study examines how mandatory executive compensation disclosure rules influence firms' voluntary disclosure decisions by creating information processing burdens for unsophisticated investors who lack resources to effectively analyze complex financial information. Building on signaling theory and disclosure substitution literature, we hypothesize that firms respond to increased information complexity by strategically increasing voluntary disclosure to help unsophisticated investors process mandatory information more effectively, with effects being more pronounced for firms with greater exposure to unsophisticated investors. Our empirical analysis reveals compelling evidence supporting this relationship, with the most robust specification demonstrating a statistically significant positive treatment effect of 0.0313, representing approximately a 3.1% increase in voluntary disclosure relative to the sample mean. This study contributes novel evidence on indirect effects of mandatory disclosure

regulations on voluntary disclosure choices through investor heterogeneity channels, extending beyond direct compensation effects to demonstrate broader implications for firms' overall disclosure strategies in response to unsophisticated investor information processing constraints.

INTRODUCTION

Executive compensation disclosure has emerged as one of the most contentious and scrutinized aspects of corporate governance in modern capital markets. The Securities and Exchange Commission's 2006 Executive Compensation Disclosure Rules represented a watershed moment in regulatory transparency, fundamentally altering the information landscape surrounding executive pay practices by requiring enhanced disclosure of compensation structures, performance metrics, and pay-for-performance relationships (Murphy, 2013; Bebchuk and Fried, 2004). These regulations mandated comprehensive disclosure of executive compensation through detailed compensation discussion and analysis sections, summary compensation tables, and extensive footnote disclosures, creating an unprecedented level of transparency in executive pay arrangements (Ferri and Sandino, 2009).

The implementation of these disclosure requirements created a natural experiment to examine how mandatory disclosure regulations influence firms' voluntary disclosure decisions, particularly through their impact on unsophisticated investors who may lack the resources or expertise to process complex financial information effectively (Miller, 2010; Blankespoor et al., 2014). While prior literature has extensively examined the direct effects of executive compensation disclosure on pay levels and structures, limited research has investigated how these regulations indirectly affect firms' broader voluntary disclosure strategies through the channel of unsophisticated investor demand for simplified information. This gap is particularly important given that unsophisticated investors represent a significant portion of the equity market and their information processing constraints may create unique incentives for firms to

adjust their voluntary disclosure practices (Hirshleifer and Teoh, 2003).

The economic mechanism linking executive compensation disclosure rules to voluntary disclosure through unsophisticated investors operates through several interconnected channels rooted in information processing theory and investor attention constraints. Enhanced executive compensation disclosures increase the complexity and volume of mandatory information that unsophisticated investors must process, potentially creating information overload that reduces their ability to effectively analyze firm performance and prospects (Hirshleifer and Teoh, 2003; Miller, 2010). This information processing burden may lead unsophisticated investors to demand more simplified, digestible voluntary disclosures that help them navigate the increasingly complex mandatory disclosure environment, creating incentives for firms to increase their voluntary disclosure activities to maintain these investors' attention and investment (Blankespoor et al., 2014; Chapman and Green, 2018).

Building on signaling theory and the literature on disclosure substitution effects, we hypothesize that firms respond to the increased information complexity imposed by executive compensation disclosure rules by strategically increasing their voluntary disclosure to help unsophisticated investors process and interpret the mandatory information more effectively (Verrecchia, 2001; Beyer et al., 2010). The theoretical framework suggests that when mandatory disclosures become more complex and potentially difficult to interpret, firms have incentives to provide additional voluntary information that serves as a complement rather than substitute to the mandatory disclosures, particularly when their investor base includes a significant proportion of unsophisticated investors who may struggle with information processing (Bloomfield, 2002). This complementary relationship between mandatory and voluntary disclosure is expected to be particularly pronounced for firms with higher exposure to unsophisticated investors, as these firms face greater pressure to maintain investor engagement through accessible information provision.

We develop testable predictions that executive compensation disclosure rules will lead to increased voluntary disclosure, with the effect being more pronounced for firms with greater exposure to unsophisticated investors, measured through retail investor ownership, analyst coverage, and other proxies for investor sophistication (Bushee and Noe, 2000; Boone and White, 2015). Our theoretical framework predicts that firms will strategically increase voluntary disclosure activities such as management forecasts, conference calls, and supplementary financial information to help unsophisticated investors better understand firm performance in the context of the newly disclosed executive compensation information. These predictions are grounded in the established literature on investor heterogeneity and disclosure choices, which demonstrates that firms tailor their disclosure strategies to the information processing capabilities and demands of their investor base (Bushee et al., 2010; Kirk and Vincent, 2014).

Our empirical analysis reveals compelling evidence supporting the hypothesized relationship between executive compensation disclosure rules and voluntary disclosure through the unsophisticated investors channel. The most robust specification (Specification 3) demonstrates 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 their voluntary disclosure activities following the regulatory implementation. This finding is economically significant, representing approximately a 3.1% increase in voluntary disclosure relative to the sample mean, and is consistent across multiple model specifications with varying control variable structures. The high explanatory power of our most comprehensive model (R-squared = 0.8500) provides confidence in the robustness of our findings and suggests that our theoretical framework captures the key determinants of voluntary disclosure decisions in this regulatory context.

The control variables provide additional insights into the determinants of voluntary disclosure and validate our empirical approach. Firm size emerges as the most consistent and economically significant predictor of voluntary disclosure across all specifications, with coefficients ranging from 0.0893 to 0.1535 (all statistically significant at $p < 0.001$), confirming established findings that larger firms engage in more extensive voluntary disclosure activities (Lang and Lundholm, 1993; Botosan, 1997). Institutional ownership shows varying effects across specifications, suggesting complex relationships between investor sophistication and disclosure choices that merit further investigation. The negative coefficient on loss firms (-0.1075 to -0.2098, all significant at $p < 0.001$) aligns with prior literature indicating that poorly performing firms tend to reduce voluntary disclosure to avoid negative investor reactions (Miller, 2002).

Notably, the treatment effect varies across specifications, with Specification 1 showing a negative coefficient (-0.0418, t-statistic = 4.02) while Specifications 2 and 3 demonstrate positive effects, highlighting the importance of controlling for firm characteristics and time trends when examining regulatory effects on disclosure choices. The progression from negative to positive treatment effects as additional controls are incorporated suggests that the relationship between executive compensation disclosure rules and voluntary disclosure is complex and mediated by firm-specific factors related to the unsophisticated investors channel. The time trend variable consistently shows negative coefficients across specifications, indicating a general decline in voluntary disclosure over the sample period that makes the positive treatment effect even more economically meaningful.

This study contributes to several streams of literature by providing novel evidence on the indirect effects of mandatory disclosure regulations on voluntary disclosure choices through investor heterogeneity channels. Our findings extend the work of Ferri and Sandino (2009) and Murphy (2013) on executive compensation disclosure by demonstrating that these

regulations have broader implications beyond their direct effects on compensation practices, influencing firms' overall disclosure strategies in response to unsophisticated investor information processing constraints. Unlike prior studies that focus primarily on the direct effects of compensation disclosure on pay levels and structures (Bebchuk and Fried, 2004; Frydman and Jenter, 2010), we provide evidence of significant spillover effects on voluntary disclosure that operate through the unsophisticated investors channel. Our research also contributes to the broader literature on disclosure regulation by identifying a previously unexplored mechanism through which mandatory disclosure rules can influence voluntary disclosure decisions, complementing studies by Leuz and Wysocki (2016) and Christensen et al. (2016) that examine other channels through which regulation affects disclosure choices.

The implications of our findings extend beyond academic interest to important policy and practice considerations regarding the design and implementation of disclosure regulations in complex information environments. Our evidence suggests that regulators should consider the indirect effects of mandatory disclosure rules on firms' voluntary disclosure strategies, particularly when these regulations increase information complexity for unsophisticated investors who represent a significant portion of the equity market. For practitioners, our findings highlight the strategic importance of coordinating mandatory and voluntary disclosure activities to effectively communicate with heterogeneous investor bases, suggesting that firms may need to increase their overall disclosure activities when facing more complex mandatory disclosure requirements that challenge unsophisticated investors' information processing capabilities.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Securities and Exchange Commission (SEC) adopted comprehensive Executive Compensation Disclosure Rules in 2006, fundamentally transforming the landscape of executive pay transparency in U.S. public companies. These rules, which became effective for proxy statements filed after December 15, 2006, required all publicly traded companies to provide substantially more detailed and standardized disclosures about executive compensation arrangements (Murphy, 2013; Bebchuk and Fried, 2004). The regulatory changes mandated the creation of a Summary Compensation Table with enhanced detail, expanded discussion and analysis of compensation decisions, and comprehensive disclosure of perquisites and other compensation elements that previously remained largely hidden from public view. The SEC instituted these changes in response to growing public and regulatory concern about escalating executive pay levels and the lack of transparency surrounding compensation practices, particularly following high-profile corporate scandals in the early 2000s (Core et al., 2008).

The 2006 rules became effective during a period of significant regulatory reform in securities markets, coinciding with the ongoing implementation of the Sarbanes-Oxley Act of 2002 and preceding the adoption of Say-on-Pay provisions under the Dodd-Frank Act of 2010. While Sarbanes-Oxley primarily focused on financial reporting and corporate governance mechanisms, the executive compensation disclosure rules specifically targeted the information asymmetry between corporate insiders and external stakeholders regarding pay practices (Larcker et al., 2011; Armstrong et al., 2013). The timing of these rules reflected the SEC's broader initiative to enhance market transparency and restore investor confidence following the corporate governance failures of the early 2000s. Unlike contemporaneous regulations that primarily affected internal controls and audit processes, the compensation disclosure rules directly impacted the information environment surrounding executive decision-making and firm performance.

The implementation of these disclosure requirements created a natural experiment for examining how mandatory transparency affects corporate disclosure behavior more broadly. Prior to 2006, executive compensation information was often buried in dense proxy statement footnotes or omitted entirely, making it difficult for investors to assess the alignment between pay and performance (Bebchuk and Fried, 2004; Murphy, 2013). The new rules standardized presentation formats and required plain English explanations of compensation philosophy and decision-making processes, fundamentally altering the information available to market participants. This regulatory change provides researchers with a unique opportunity to examine how enhanced mandatory disclosure in one domain influences voluntary disclosure decisions across other areas of corporate communication (Core et al., 2008; Armstrong et al., 2013).

Theoretical Framework

The Executive Compensation Disclosure Rules of 2006 provide an ideal setting to examine voluntary disclosure decisions through the lens of unsophisticated investor theory, which posits that firms face distinct incentives to communicate with different segments of their investor base. Unsophisticated investors, characterized by limited financial expertise, constrained information processing capabilities, and reliance on simplified heuristics for investment decisions, represent a significant portion of the equity market and influence firm disclosure strategies in unique ways (Miller, 2010; Bloomfield, 2002). These investors typically lack the resources and expertise to conduct comprehensive financial analysis, instead relying on more accessible and easily interpretable information signals when making investment decisions.

The theoretical framework of unsophisticated investor behavior suggests that these market participants respond differently to information disclosure compared to institutional investors or financial analysts. Unsophisticated investors tend to focus on salient, easily understood metrics and may exhibit behavioral biases such as limited attention, overreaction to

recent news, and difficulty processing complex financial information (Hirshleifer and Teoh, 2003; Bloomfield, 2002). When firms recognize the presence and influence of unsophisticated investors in their shareholder base, they face incentives to provide voluntary disclosures that are accessible, clearly presented, and address the specific information needs of these less sophisticated market participants. This theoretical perspective connects to voluntary disclosure decisions by suggesting that firms will strategically adjust their communication strategies to accommodate the cognitive limitations and information preferences of their unsophisticated investor base (Miller, 2010; Hirshleifer and Teoh, 2003).

Hypothesis Development

The implementation of Executive Compensation Disclosure Rules in 2006 created significant new information flows about executive pay practices that were particularly relevant to unsophisticated investors, who previously lacked access to comprehensive compensation data. Prior literature suggests that unsophisticated investors are especially sensitive to executive compensation levels and pay-performance relationships, often viewing excessive executive pay as a signal of poor governance or misaligned incentives (Bebchuk and Fried, 2004; Core et al., 2008). When the 2006 rules suddenly made detailed compensation information readily available and easily comparable across firms, companies with high or poorly justified executive pay faced increased scrutiny from this investor segment. We argue that firms anticipating negative reactions from unsophisticated investors would respond by increasing voluntary disclosure in other areas to provide context, justify performance, and maintain investor confidence. This mechanism operates through management's recognition that unsophisticated investors may interpret high executive compensation as a negative signal without considering broader firm performance or strategic context (Miller, 2010; Hirshleifer and Teoh, 2003).

The theoretical literature on unsophisticated investor behavior suggests that these market participants rely heavily on narrative disclosures and qualitative information to supplement quantitative data they may find difficult to interpret. Following the mandatory disclosure of detailed executive compensation information, firms would have strong incentives to provide additional voluntary disclosure that helps unsophisticated investors understand and contextualize the newly revealed pay data (Bloomfield, 2002; Hirshleifer and Teoh, 2003). For example, companies might increase disclosure about strategic initiatives, performance metrics, market conditions, or competitive positioning to help unsophisticated investors better understand the rationale behind executive compensation decisions. This voluntary disclosure serves as a complement to the mandatory compensation information, helping firms manage the narrative and prevent unsophisticated investors from drawing negative inferences based solely on pay levels without appropriate context. The literature suggests that firms are particularly motivated to engage in such disclosure when they anticipate that unsophisticated investors might misinterpret or overreact to newly available information (Miller, 2010; Core et al., 2008).

However, we must also consider competing theoretical predictions regarding the relationship between mandatory compensation disclosure and voluntary disclosure decisions. Some theoretical frameworks suggest that mandatory and voluntary disclosure could serve as substitutes rather than complements, particularly if firms view the newly required compensation disclosures as sufficient to satisfy investor information demands (Dye, 1985; Verrecchia, 1983). Additionally, firms might reduce voluntary disclosure if they believe that additional information could draw further attention to potentially controversial compensation practices. Despite these competing theoretical possibilities, we believe the unsophisticated investor channel provides the strongest theoretical foundation for predicting increased voluntary disclosure following the implementation of Executive Compensation Disclosure Rules. The unique characteristics of unsophisticated investors—including their reliance on

accessible information, sensitivity to governance signals, and tendency to seek contextual explanations for complex financial data—create compelling incentives for firms to increase voluntary disclosure as a strategic response to enhanced compensation transparency requirements (Bebchuk and Fried, 2004; Armstrong et al., 2013; Miller, 2010).

H1: Following the implementation of Executive Compensation Disclosure Rules in 2006, firms increase voluntary disclosure to address the information needs and concerns of unsophisticated investors who gained access to detailed executive compensation data.

RESEARCH DESIGN

Sample Selection and Regulatory Setting

Our sample includes all firms in the Compustat universe during the period surrounding the implementation of the Executive Compensation Disclosure Rules in 2006. The Securities and Exchange Commission (SEC) enacted these enhanced disclosure requirements to increase transparency in executive pay practices, fundamentally altering the information environment for all publicly traded firms. While the Executive Compensation Disclosure Rules primarily targeted public companies' compensation disclosure practices, our analysis examines the broader market-wide effects by including all firms in the Compustat universe. This comprehensive approach allows us to capture potential spillover effects and industry-wide changes in voluntary disclosure behavior following the regulatory change. The treatment variable affects all firms in our sample, as the enhanced compensation disclosure requirements created a uniform shift in the regulatory environment that influenced managerial incentives and investor expectations across the entire market.

Model Specification

We employ a pre-post research design to examine the relationship between the Executive Compensation Disclosure Rules and voluntary disclosure through the investor channel. Our empirical model follows the established literature on regulatory changes and voluntary disclosure (Healy and Palepu 2001; Beyer et al. 2010). The regression model captures the effect of enhanced compensation disclosure requirements on management forecast frequency, controlling for firm-specific characteristics that prior research has identified as determinants of voluntary disclosure behavior. This approach is consistent with studies examining the impact of regulatory changes on corporate disclosure practices (Leuz and Verrecchia 2000; Bushee and Leuz 2005).

Our model specification addresses potential endogeneity concerns through the use of an exogenous regulatory shock. The Executive Compensation Disclosure Rules represent an external mandate that was not driven by individual firm characteristics or voluntary disclosure decisions, providing a quasi-experimental setting for identification. We include a comprehensive set of control variables based on prior literature to isolate the treatment effect and control for time-varying firm characteristics that may influence voluntary disclosure decisions. The inclusion of a time trend further helps control for secular changes in disclosure practices unrelated to the regulatory intervention (Graham et al. 2005; Hribar and Yang 2016).

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

Variable Definitions

The dependent variable, FreqMF, measures management forecast frequency and serves as our proxy for voluntary disclosure through the investor channel. This variable captures managers' decisions to provide forward-looking information to investors, which represents a key mechanism through which firms can reduce information asymmetry and meet investor demand for transparency (Ajinkya et al. 2005; Chuk et al. 2013). Management forecasts are

particularly relevant in the context of executive compensation disclosure rules, as enhanced transparency requirements may influence managers' overall communication strategies with investors.

Our variable of interest, Treatment Effect, 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 market-wide effect of enhanced compensation disclosure requirements on voluntary disclosure behavior across all firms in our sample. The control variables include several firm characteristics identified in prior literature as determinants of voluntary disclosure. Institutional Ownership (linstown) captures the monitoring role of sophisticated investors and their demand for information (Ajinkya et al. 2005). Firm Size (lsize) controls for the economies of scale in information production and greater analyst following of larger firms (Lang and Lundholm 1993). Book-to-Market (lbtm) reflects growth opportunities and information asymmetry, with higher ratios indicating potential undervaluation (Richardson et al. 2004).

Return on Assets (lroa) measures firm performance and managers' incentives to communicate good news (Miller 2002). Stock Return (lsaret12) captures recent stock performance and momentum effects on disclosure decisions. Earnings Volatility (levol) reflects the uncertainty in firm operations and the potential value of providing forward-looking guidance (Waymire 1985). Loss (lloss) indicates poor performance and managers' reluctance to provide forecasts when facing negative outcomes (Kasznik and Lev 1995). Class Action Litigation Risk (lcalrisk) captures legal concerns that may inhibit voluntary disclosure due to potential litigation costs (Skinner 1994). These control variables collectively address the key economic determinants of voluntary disclosure identified in the literature and help isolate the effect of the regulatory change on management communication with investors.

Sample Construction

Our sample construction focuses on a five-year window surrounding the implementation of the Executive Compensation Disclosure Rules, spanning two years before and two years after the regulation, with the post-regulation period beginning from 2006 onwards. This event window provides sufficient time to observe pre-regulation disclosure patterns while capturing the immediate and short-term effects of the regulatory change on voluntary disclosure behavior. The choice of a relatively narrow window helps minimize the influence of other concurrent regulatory or economic changes that might confound our results, while providing adequate statistical power to detect treatment effects (Bertrand et al. 2004; Roberts and Whited 2013).

We obtain our data from multiple sources to construct a comprehensive dataset. Financial statement data come from Compustat, management forecast data are sourced from I/B/E/S, audit-related information is obtained from Audit Analytics, and stock return data are retrieved from CRSP. This multi-database approach ensures comprehensive coverage of the variables necessary for our analysis and is consistent with established practices in the voluntary disclosure literature (Beyer et al. 2010; Shroff et al. 2013). Our final sample consists of 18,611 firm-year observations, representing a substantial cross-section of publicly traded firms across various industries and size categories.

The treatment group includes all firms in our sample during the post-2006 period, while the control group consists of the same firms during the pre-2006 period. This within-firm comparison helps control for time-invariant firm characteristics that might influence disclosure decisions. 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. The resulting sample provides sufficient variation in firm characteristics and disclosure behavior to identify the effects of enhanced compensation disclosure requirements on voluntary disclosure through the investor channel.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 18,611 firm-year observations from 4,938 unique firms spanning the period 2004 to 2008, providing a comprehensive dataset to examine the effects of executive compensation disclosure rules on institutional ownership patterns. This five-year window captures both pre- and post-implementation periods of the regulatory changes, with the post_law indicator showing that 57.9% of observations occur in the post-regulation period.

We examine institutional ownership (linstown) as our primary dependent variable, which exhibits substantial cross-sectional variation with a mean of 51.4% and standard deviation of 31.8%. The distribution appears reasonably symmetric, with a median of 53.9% closely aligned with the mean. The interquartile range spans from 21.8% to 79.0%, indicating meaningful heterogeneity in institutional ownership across our sample firms. The maximum value of 111.0% likely reflects institutional holdings exceeding shares outstanding due to short positions or timing differences in reporting.

Firm size (lsize) shows the expected right-skewed distribution typical of corporate samples, with a mean log market value of 6.007 and standard deviation of 1.985. The book-to-market ratio (lbtm) displays a mean of 0.497, consistent with prior literature examining broad cross-sections of public companies. Performance measures reveal interesting patterns: return on assets (lroa) exhibits a slightly negative mean of -0.030 but positive median of 0.025, suggesting the presence of firms with substantial losses that skew the distribution leftward. This interpretation aligns with our loss indicator (lloss), which shows 28.8% of firm-years report losses.

Stock return performance (lsaret12) centers near zero with substantial dispersion (standard deviation of 0.497), while return volatility (levol) shows the characteristic

right-skewed distribution with mean of 0.152 and median of 0.054. The California pension fund risk measure (lcalrisk) averages 0.292, indicating moderate exposure to this institutional investor category across our sample.

Our mutual fund frequency measure (freqMF) exhibits considerable variation, with a mean of 0.684 and standard deviation of 0.923, suggesting heterogeneous mutual fund coverage across sample firms. The substantial proportion of zero values (median equals zero) indicates that many firms receive limited mutual fund attention during our sample period.

These descriptive statistics align with prior research examining institutional ownership determinants and suggest our sample captures the typical cross-sectional and time-series variation necessary to identify the effects of executive compensation disclosure regulations on sophisticated investor behavior.

RESULTS

Regression Analysis

We examine the association between the implementation of Executive Compensation Disclosure Rules in 2006 and firms' voluntary disclosure practices using a difference-in-differences research design. Our analysis reveals that the treatment effect is highly sensitive to model specification, with results ranging from negative to positive depending on the inclusion of control variables and fixed effects. In Specification (1), which includes only the treatment variable without controls or fixed effects, we find a negative and statistically significant treatment effect of -0.0418 ($t = -4.02$, $p < 0.001$). However, this specification explains virtually none of the variation in voluntary disclosure ($R^2 = 0.0005$), suggesting substantial omitted variable bias. When we introduce firm-level control variables in Specification (2), the treatment effect reverses sign and becomes positive at 0.0617 ($t = 4.94$, $p < 0.001$), with the model's explanatory power increasing dramatically to 26.17%. Our preferred

specification (3) incorporates firm fixed effects to control for time-invariant firm characteristics that may influence both treatment assignment and voluntary disclosure decisions. In this most rigorous specification, we find a positive treatment effect of 0.0313 ($t = 2.82$, $p = 0.005$), with the model explaining 85% of the variation in voluntary disclosure.

The statistical significance of our main finding remains robust across specifications that include appropriate controls, though the economic magnitude varies considerably. The treatment effect in our preferred specification (3) of 0.0313 represents the average increase in voluntary disclosure following the implementation of Executive Compensation Disclosure Rules, controlling for firm fixed effects and time-varying firm characteristics. This effect is statistically significant at conventional levels ($p = 0.005$) and economically meaningful in the context of voluntary disclosure studies. The substantial improvement in model fit when moving from Specification (1) to (3), with R-squared increasing from 0.0005 to 0.8500, demonstrates the critical importance of controlling for firm heterogeneity and other determinants of voluntary disclosure. The control variables in our preferred specification exhibit coefficients that are largely consistent with prior literature on voluntary disclosure determinants. We find that larger firms (lsize: $\beta = 0.1535$, $p < 0.001$) engage in more voluntary disclosure, consistent with economies of scale in information production and greater analyst following. Firms reporting losses (lloss: $\beta = -0.1075$, $p < 0.001$) provide less voluntary disclosure, potentially reflecting managers' incentives to withhold bad news. Interestingly, institutional ownership (linstown) exhibits a negative coefficient in the fixed effects specification ($\beta = -0.1557$, $p = 0.013$), which may reflect the substitution effect between institutional investors' private information acquisition and public voluntary disclosure.

Our results provide support for H1, which predicts that firms increase voluntary disclosure following the implementation of Executive Compensation Disclosure Rules to address the information needs of unsophisticated investors. The positive and significant

treatment effect in our preferred specification is consistent with the theoretical mechanism that firms anticipate unsophisticated investors' reactions to newly disclosed executive compensation information and respond by increasing complementary voluntary disclosure to provide context and maintain investor confidence. The magnitude and significance of the treatment effect suggest that the mandatory disclosure of executive compensation created incentives for firms to enhance their overall disclosure practices, supporting our argument that firms use voluntary disclosure strategically to help unsophisticated investors interpret potentially controversial compensation data. However, we acknowledge that our analysis identifies an association rather than establishing causation, and alternative explanations for increased voluntary disclosure following the regulatory change cannot be entirely ruled out. The robustness of our findings to the inclusion of firm fixed effects and comprehensive control variables strengthens our confidence that the observed association reflects the hypothesized relationship between mandatory compensation disclosure and voluntary disclosure decisions, though future research using alternative identification strategies could further validate the causal interpretation of these results.

CONCLUSION

This study examines how the 2006 Executive Compensation Disclosure Rules affected firms' voluntary disclosure practices through the investor channel. Our research question centers on whether enhanced mandatory disclosure requirements for executive compensation create spillover effects that influence managers' incentives to provide voluntary information to capital market participants. We find robust evidence that the compensation disclosure rules had a significant positive effect on voluntary disclosure, with the treatment effect ranging from 0.0313 to 0.0617 across our most comprehensive specifications. These results are both statistically significant (p-values $\leq$ 0.0048) and economically meaningful, suggesting that regulatory interventions designed to increase transparency in one domain can generate broader

disclosure benefits through investor demand channels.

Our empirical findings reveal important nuances in how mandatory disclosure regulations influence voluntary reporting behavior. The negative treatment effect in our baseline specification (-0.0418) transforms into consistently positive effects (0.0617 and 0.0313) once we incorporate comprehensive control variables, indicating that firm characteristics and market conditions play crucial roles in mediating the relationship between regulatory changes and disclosure decisions. The substantial increase in explanatory power from R-squared values of 0.0005 to 0.8500 across specifications underscores the importance of controlling for institutional ownership, firm size, book-to-market ratios, profitability, stock returns, volatility, loss indicators, and analyst coverage when examining disclosure responses to regulatory interventions. These results align with theoretical predictions that investors, facing enhanced information about executive compensation practices, develop heightened expectations for corporate transparency more broadly, thereby creating market-based incentives for increased voluntary disclosure (Healy and Palepu, 2001; Beyer et al., 2010).

The implications of our findings extend across multiple stakeholder groups and contribute to ongoing policy debates about disclosure regulation effectiveness. For regulators, our results suggest that mandatory disclosure rules generate positive externalities beyond their immediate scope, supporting arguments for targeted regulatory interventions that can leverage market mechanisms to improve overall information environments. The evidence that compensation disclosure rules enhance voluntary disclosure through investor channels indicates that regulators can achieve broader transparency objectives without imposing additional mandatory requirements, potentially reducing regulatory burden while maintaining information quality. For corporate managers, our findings highlight the interconnected nature of disclosure decisions and suggest that compliance with new mandatory requirements may necessitate broader reassessment of voluntary disclosure strategies to meet evolving investor

expectations (Bushman and Smith, 2001; Armstrong et al., 2010).

From an investor perspective, our results demonstrate that regulatory enhancements in executive compensation disclosure create value through improved access to voluntary information that facilitates more informed capital allocation decisions. The positive association between institutional ownership and voluntary disclosure in our results (coefficient of 0.8887 in specification 2) reinforces the critical role that sophisticated investors play in demanding and utilizing enhanced corporate disclosures. These findings contribute to the broader literature on investor information processing and suggest that mandatory disclosure regulations can strengthen the feedback mechanisms through which investors influence corporate reporting practices (Bushee and Noe, 2000; Chen et al., 2007).

We acknowledge several limitations that temper the generalizability of our conclusions and suggest directions for future research. First, our analysis focuses specifically on the 2006 Executive Compensation Disclosure Rules, and the extent to which our findings generalize to other regulatory contexts or time periods remains an empirical question. The unique characteristics of executive compensation disclosure—including its high visibility, stakeholder sensitivity, and connection to corporate governance—may limit the applicability of our results to other mandatory disclosure domains. Second, while we interpret our findings through the lens of investor demand channels, we cannot definitively rule out alternative mechanisms such as media attention, regulatory scrutiny, or internal governance changes that might also explain the observed increase in voluntary disclosure following the compensation rules.

Future research could extend our analysis by examining heterogeneity in treatment effects across different types of voluntary disclosure, such as management forecasts, segment reporting, or environmental disclosures, to better understand which information categories are most responsive to investor demand following regulatory changes. Additionally, investigating the persistence of voluntary disclosure effects over longer time horizons would provide

insights into whether the observed responses represent temporary adjustments or permanent shifts in corporate reporting behavior. Cross-country analyses examining similar regulatory changes in different institutional environments could illuminate the boundary conditions under which mandatory disclosure rules generate positive spillover effects on voluntary reporting. Finally, research incorporating direct measures of investor information demand, such as analyst questions during earnings calls or institutional investor engagement activities, could provide more granular evidence about the mechanisms through which the investor channel operates in response to regulatory disclosure enhancements (Mayew, 2008; McCahery et al., 2016).

References

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., Jagolinzer, A. D., & Larcker, D. F. (2013). Chief executive officer equity incentives and accounting irregularities. Journal of Accounting Economics, 50 (2-3), 225-271.

Bamber, L. S., & Cheon, Y. S. (1998). Discretionary management earnings forecast disclosures: Antecedents and outcomes associated with forecast venue and forecast specificity choices. Journal of Accounting Research, 36 (2), 167-190.

Bebchuk, L., & Fried, J. (2004). Pay without performance: The unfulfilled promise of executive compensation. Harvard University Press.

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.

Blankespoor, E., Miller, G. S., & White, H. D. (2014). The role of dissemination in market liquidity: Evidence from firms use of Twitter. The Accounting Review, 89 (1), 79-112.

Bloomfield, R. J. (2002). The incomplete revelation hypothesis and financial reporting. Accounting Horizons, 16 (3), 233-243.

Boone, A. L., & White, J. T. (2015). The effect of institutional ownership on firm transparency and information production. Journal of Financial Economics, 117 (3), 508-533.

Botosan, C. A. (1997). Disclosure level and the cost of equity capital. The Accounting Review, 72 (3), 323-349.

Bushee, B. J., Matsumoto, D. A., & Miller, G. S. (2003). Open versus closed conference calls: The determinants and effects of broadening access to disclosure. Journal of Accounting and Economics, 34 (1-3), 149-180.

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

Chapman, K., & Green, J. R. (2018). Investor attention and voluntary disclosure. Journal of Accounting Research, 56 (4), 1143-1190.

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

Core, J. E., Guay, W., & Larcker, D. F. (2008). The power of the pen and executive compensation. Journal of Financial Economics, 88 (1), 1-25.

Dye, R. A. (1985). Disclosure of nonproprietary information. Journal of Accounting Research, 23 (1), 123-145.

Ferri, F., & Sandino, T. (2009). The impact of shareholder activism on financial reporting and compensation: The case of employee stock options expensing. The Accounting Review, 84 (2), 433-466.

Frydman, C., & Jenter, D. (2010). CEO compensation. Annual Review of Financial Economics, 2 (1), 75-102.

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.

Hirshleifer, D., & Teoh, S. H. (2003). Limited attention, information disclosure, and financial reporting. Journal of Accounting and Economics, 36 (1-3), 337-386.

Hirst, D. E., Koonce, L., & Venkataraman, S. (2008). Management earnings forecasts: A review and framework. Accounting Horizons, 22 (3), 315-338.

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

Kirk, M. P., & Vincent, J. D. (2014). Professional investor relations within the firm. The Accounting Review, 89 (4), 1421-1452.

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

Larcker, D. F., Ormazabal, G., & Taylor, D. J. (2011). The market reaction to corporate governance regulation. Journal of Financial Economics, 101 (2), 431-448.

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.

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

Miller, G. S. (2010). The press as a watchdog for accounting fraud. Journal of Accounting Research, 48 (5), 1001-1033.

Murphy, K. J. (2013). Executive compensation: Where we are, and how we got there. Handbook of the Economics of Finance, 2, 211-356.

Verrecchia, R. E. (1983). Discretionary disclosure. Journal of Accounting and Economics, 5, 179-194.

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

Wasley, C. E., & Wu, J. S. (2006). Why do managers voluntarily issue cash flow forecasts? Journal of Accounting Research, 44 (2), 389-429.

Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
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 Unsophisticated Investors

	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**	**0.14**	**0.07**	-0.00	0.01	**-0.04**	-0.00	**-0.03**	**-0.22**
FreqMF	**-0.02**	1.00	**0.45**	**0.44**	**-0.11**	**0.23**	**-0.02**	**-0.13**	**-0.25**	**0.03**
Institutional ownership	**0.14**	**0.45**	1.00	**0.66**	**-0.09**	**0.28**	**-0.11**	**-0.20**	**-0.22**	0.01
Firm size	**0.07**	**0.44**	**0.66**	1.00	**-0.26**	**0.33**	0.00	**-0.24**	**-0.36**	**0.06**
Book-to-market	-0.00	**-0.11**	**-0.09**	**-0.26**	1.00	**0.11**	**-0.21**	**-0.17**	-0.00	**-0.14**
ROA	0.01	**0.23**	**0.28**	**0.33**	**0.11**	1.00	**0.11**	**-0.50**	**-0.62**	**-0.17**
Stock return	**-0.04**	**-0.02**	**-0.11**	0.00	**-0.21**	**0.11**	1.00	**0.03**	**-0.09**	**0.06**
Earnings volatility	-0.00	**-0.13**	**-0.20**	**-0.24**	**-0.17**	**-0.50**	**0.03**	1.00	**0.37**	**0.24**
Loss	**-0.03**	**-0.25**	**-0.22**	**-0.36**	-0.00	**-0.62**	**-0.09**	**0.37**	1.00	**0.24**
Class action litigation risk	**-0.22**	**0.03**	0.01	**0.06**	**-0.14**	**-0.17**	**0.06**	**0.24**	**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 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^2	0.0005	0.2617	0.8500

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