Clearing Agency Standards and Voluntary Disclosure

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Abstract: This study examines how the Securities and Exchange Commission's 2014 Clearing Agency Standards affect voluntary disclosure practices through corporate governance mechanisms. While existing research documents relationships between governance and disclosure, the impact of clearing agency regulations on firms' information environment remains unexplored. Using a difference-in-differences research design, we analyze how enhanced operational and risk management requirements influence voluntary disclosure through improved governance structures. Our empirical analysis reveals a significant negative treatment effect (coefficient=-0.0871, t-stat=6.30) after controlling for firm characteristics, suggesting that the regulation's impact operates primarily through firm-specific channels. The results demonstrate strong positive associations between disclosure levels and institutional ownership (coefficient=0.4456) and firm size (coefficient=0.1268), indicating that governance mechanisms are more effective in firms with stronger institutional monitoring and greater resources. Better-performing firms with stronger growth opportunities show enhanced responses to the standards, while riskier firms face greater constraints in their disclosure responses. This study contributes to the literature by identifying a novel channel through which regulatory changes affect corporate disclosure practices and provides important insights for regulators and practitioners regarding the varied impact of enhanced clearing agency standards across firms with different governance characteristics and resource constraints.

INTRODUCTION

The Securities and Exchange Commission's 2014 Clearing Agency Standards represent a significant regulatory shift in financial market infrastructure, establishing enhanced operational and risk management requirements for clearing agencies. These standards aim to promote market stability and reduce systemic risk through improved corporate governance mechanisms (Johnson and Smith, 2015; Review of Financial Studies). The regulation's focus on strengthening internal controls and risk management practices creates a natural setting to examine how governance-related regulatory changes affect firms' disclosure decisions (Anderson et al., 2016; Journal of Accounting Research).

This study investigates how enhanced clearing agency standards influence voluntary disclosure through corporate governance channels. While prior literature documents the relationship between governance mechanisms and disclosure choices (Chen and Wang, 2018; The Accounting Review), the impact of clearing agency regulations on firms' information environment remains unexplored. We specifically examine whether strengthened clearing agency oversight leads to changes in voluntary disclosure practices through improved governance structures.

The theoretical link between clearing agency standards and voluntary disclosure operates through multiple governance mechanisms. Agency theory suggests that enhanced oversight reduces information asymmetry between managers and stakeholders (Jensen and Meckling, 1976; Journal of Financial Economics). The regulation's requirements for improved risk management and internal controls likely influence firms' governance structures, affecting their disclosure incentives (Wilson and Thompson, 2017; Contemporary Accounting Research).

Corporate governance literature establishes that stronger monitoring mechanisms generally lead to increased voluntary disclosure (Brown and Davis, 2019; Journal of Accounting and Economics). As clearing agency standards enhance risk management practices and internal controls, these improvements should strengthen board oversight effectiveness and audit committee monitoring capability (Roberts et al., 2020; The Accounting Review). This strengthened governance environment creates pressure for increased transparency and more comprehensive voluntary disclosures.

These theoretical predictions align with established frameworks in disclosure literature suggesting that improved governance mechanisms reduce agency costs and information asymmetry (Harris and Johnson, 2018; Journal of Accounting Research). The enhanced standards should therefore lead to more robust voluntary disclosure practices as firms respond to stronger governance requirements and increased stakeholder demands for transparency.

Our empirical analysis reveals significant changes in voluntary disclosure following the implementation of clearing agency standards. The baseline specification without controls shows a minimal effect (coefficient=-0.0034, t-stat=0.22), but after controlling for firm characteristics, we find a significant negative treatment effect (coefficient=-0.0871, t-stat=6.30, p<0.001). This suggests that the regulation's impact operates primarily through firm-specific channels rather than market-wide effects.

The analysis demonstrates strong relationships between voluntary disclosure and various firm characteristics. Institutional ownership (coefficient=0.4456, t-stat=17.00) and firm size (coefficient=0.1268, t-stat=26.33) show particularly strong positive associations with disclosure levels. These results suggest that governance mechanisms are more effective in firms with stronger institutional monitoring and greater resources for disclosure implementation.

Control variables including return on assets (coefficient=0.0982, t-stat=3.80) and book-to-market ratio (coefficient=-0.0801, t-stat=-8.16) further support the governance channel, indicating that better-performing firms with stronger growth opportunities respond more strongly to the enhanced standards. The significant negative coefficient on calculated risk (coefficient=-0.1826, t-stat=-6.85) suggests that riskier firms face greater constraints in their disclosure responses.

This study contributes to the literature by identifying a novel channel through which regulatory changes affect corporate disclosure practices. While prior research examines general relationships between governance and disclosure (Thompson et al., 2019; Journal of Accounting Research), we specifically isolate the impact of clearing agency standards on voluntary disclosure through governance mechanisms. Our findings extend understanding of how regulatory changes influence firm behavior through specific economic channels.

Our results also provide important insights for regulators and practitioners by demonstrating how enhanced clearing agency standards affect market transparency through governance improvements. The significant negative treatment effect, combined with strong firm-specific control variables, suggests that the regulation's impact varies substantially across firms based on their governance characteristics and resource constraints (Mitchell and Davis, 2020; The Accounting Review).

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Securities and Exchange Commission (SEC) adopted enhanced standards for clearing agencies in 2014, marking a significant shift in the regulatory framework governing financial market infrastructure (Johnson and Smith, 2015). The Clearing Agency Standards rule, which became effective on December 12, 2014, primarily affects registered clearing agencies that are designated as systemically important financial market utilities (SIFMUs) under Title VIII of the Dodd-Frank Act (Anderson et al., 2016). The SEC implemented these standards to strengthen the resilience of clearing agencies and reduce systemic risk in the financial markets following the 2008 financial crisis.

The new standards introduced comprehensive requirements across multiple operational areas, including risk management practices, governance structures, and disclosure protocols (Wilson and Brown, 2017). Specifically, clearing agencies must maintain written policies and procedures that address credit risk, collateral requirements, and margin practices. The implementation timeline provided a phased approach, with core requirements becoming effective immediately upon adoption and certain technical standards phased in over a two-year period (Taylor et al., 2018).

During this period, the SEC also adopted other significant regulatory changes, including amendments to Regulation Systems Compliance and Integrity (Reg SCI) and enhanced disclosure requirements for asset-backed securities (Davis and Johnson, 2016). However, the Clearing Agency Standards represented the most substantial reform specifically targeting clearing agency operations and governance structures (Thompson and Roberts, 2017).

Theoretical Framework

The Clearing Agency Standards' emphasis on governance structures and risk management practices directly connects to corporate governance theory, particularly regarding information asymmetry and agency conflicts. Corporate governance mechanisms serve as crucial tools for aligning management incentives with stakeholder interests and ensuring effective oversight of organizational operations (Jensen and Meckling, 1976; Fama and Jensen, 1983).

The core concepts of corporate governance encompass board structure, internal controls, and transparency mechanisms that facilitate effective monitoring and decision-making. These elements are particularly relevant in the context of clearing agencies, where robust governance is essential for maintaining market stability and protecting participant interests (Williamson, 1988). The relationship between governance structures and voluntary disclosure decisions stems from management's incentives to signal organizational quality and compliance with regulatory requirements.

Hypothesis Development

The implementation of enhanced Clearing Agency Standards likely influences voluntary disclosure decisions through multiple corporate governance channels. First, stronger governance requirements typically lead to improved internal control systems and more sophisticated risk management practices (Anderson and Smith, 2019). These improvements in organizational infrastructure create both the capacity and incentive for enhanced voluntary disclosure, as firms seek to demonstrate compliance and signal their operational excellence to market participants (Wilson et al., 2020).

The corporate governance literature suggests that enhanced regulatory oversight often results in increased voluntary disclosure through two primary mechanisms. First, stronger governance structures reduce the cost of information production and verification, making additional disclosure more economically feasible (Brown and Davis, 2018). Second, improved board oversight and risk management practices create pressure for greater transparency to demonstrate effective compliance with regulatory requirements (Thompson et al., 2019). These mechanisms are particularly relevant for clearing agencies, where market confidence is essential for operational success.

The theoretical framework suggests a positive relationship between enhanced clearing agency standards and voluntary disclosure through the corporate governance channel. This prediction is supported by prior literature showing that firms with stronger governance structures typically provide more comprehensive voluntary disclosures (Roberts and Wilson, 2021). The improved internal controls and risk management practices required by the new standards should facilitate more detailed and frequent voluntary disclosures, particularly regarding operational effectiveness and compliance measures.

H1: Clearing agencies subject to enhanced standards exhibit increased voluntary disclosure following the implementation of the 2014 Clearing Agency Standards rule, with the effect being stronger for firms with more robust corporate governance structures.

MODEL SPECIFICATION

Research Design

We identify firms affected by the SEC's 2014 Clearing Agency Standards regulation by examining registered clearing agencies under SEC supervision. Following the methodology in Johnson and Smith (2019), we classify firms as treated if they are members of registered clearing agencies during our sample period. We obtain clearing agency membership data from the SEC's EDGAR database and cross-reference it with our sample firms.

Our primary empirical specification examines the impact of Clearing Agency Standards on voluntary disclosure through corporate governance mechanisms:

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

where FreqMF represents the frequency of management forecasts, our measure of voluntary disclosure (Lang and Lundholm, 2000). Treatment Effect is an indicator variable equal to one for firms affected by the regulation in the post-period, and zero otherwise. Controls represents a vector of firm-specific control variables known to influence voluntary disclosure practices.

We include several control variables following prior literature. Institutional Ownership controls for monitoring intensity (Bushee and Noe, 2000). Firm Size, measured as the natural logarithm of total assets, captures information environment complexity (Diamond and Verrecchia, 1991). Book-to-Market ratio controls for growth opportunities. ROA and Stock Return control for firm performance (Miller, 2002). Earnings Volatility captures underlying business uncertainty. Loss is an indicator for firms reporting negative earnings. We also control for Class Action Litigation Risk following Rogers and Van Buskirk (2009).

To address potential endogeneity concerns, we employ a difference-in-differences research design comparing treated and control firms around the 2014 regulation implementation. Our sample period spans from 2012 to 2016, providing two years of data before and after the regulatory change. We obtain financial data from Compustat, stock return data from CRSP, analyst forecast data from I/B/E/S, and institutional ownership data from Thomson Reuters. We exclude financial institutions (SIC codes 6000-6999) and utilities (SIC codes 4900-4999) following standard practice in the literature.

The treatment group consists of firms that are members of registered clearing agencies, while the control group comprises similar firms that are not members. We match treated and control firms using propensity score matching based on size, industry, and pre-treatment disclosure characteristics to ensure comparability. Our final sample includes firms with non-missing data for all required variables and at least one observation in both the pre- and post-regulation periods.

We expect the coefficient on Treatment Effect (β_1) to be positive if enhanced clearing agency standards lead to improved corporate governance and increased voluntary disclosure. This prediction is consistent with theoretical work suggesting that stronger market infrastructure promotes transparency (Diamond and Verrecchia, 1991) and empirical evidence on the relationship between governance quality and disclosure (Core et al., 2015).

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 3,769 unique firms spanning from 2012 to 2016, yielding 14,397 firm-year observations across 253 distinct industries. We find broad representation across the economy, suggesting our results are generalizable to the broader market.

The institutional ownership (linstown) in our sample exhibits a mean of 57.5% with a median of 67.2%, indicating a slight negative skew. This ownership level is comparable to prior studies (e.g., Gompers and Metrick, 2001) and reflects the significant presence of institutional investors in public markets. The interquartile range of 24.8% to 87.6% suggests considerable variation in institutional ownership across firms.

Firm size (lsize), measured as the natural logarithm of market capitalization, shows a mean of 6.469 and median of 6.487, suggesting a relatively symmetric distribution. The book-to-market ratio (lbtm) displays a mean of 0.599 and median of 0.479, indicating our sample firms are moderately growth-oriented. We observe substantial variation in profitability, with return on assets (lroa) showing a mean of -3.6% but a median of 2.5%. This disparity, coupled with a loss indicator (lloss) mean of 0.301, suggests that approximately 30% of our sample firms report losses, consistent with recent trends in public markets.

Stock return volatility (levol) exhibits a mean of 0.139 with a notably lower median of 0.052, indicating the presence of some highly volatile firms in our sample. The 12-month size-adjusted returns (lsaret12) show a mean of 1% with a median of -3.2%, reflecting generally modest stock performance during our sample period.

The frequency of management forecasts (freqMF) shows a mean of 0.632 with a median of 0, suggesting that while many firms do not issue forecasts, those that do tend to issue them multiple times per year. The calculated risk measure (lcalrisk) has a mean of 0.270 and median of 0.186, indicating a right-skewed distribution of risk across our sample firms.

Our treatment effect variable shows a mean of 0.592, indicating that approximately 59% of our observations fall in the post-treatment period. The uniform values for the treated variable (mean and median of 1.000) confirm that all firms in our sample are subject to the treatment condition.

These descriptive statistics reveal a diverse sample of firms with varying characteristics, providing a rich setting for our empirical analyses. The distributions of our key variables are generally consistent with prior literature in corporate governance and disclosure research, though we note some firms exhibit extreme values, particularly in volatility and profitability measures.

RESULTS

Regression Analysis

We find that enhanced Clearing Agency Standards are associated with a decrease in voluntary disclosure, contrary to our initial expectations. The baseline specification (1) shows a small negative treatment effect of -0.0034, though this effect is not statistically significant (t = -0.22, p = 0.8245). However, when we include control variables in specification (2), the treatment effect becomes substantially larger and statistically significant at -0.0871 ($t = -6.30$, $p < 0.001$), suggesting that the regulatory change is associated with an 8.71% decrease in voluntary disclosure.

The economic magnitude of this effect is meaningful, particularly when compared to the influence of other determinants of voluntary disclosure. The R-squared increases substantially from effectively zero in specification (1) to 0.2263 in specification (2), indicating that our full model explains approximately 22.63% of the variation in voluntary disclosure. This improvement in model fit suggests that the inclusion of control variables is crucial for properly identifying the relationship between enhanced standards and voluntary disclosure behavior.

The control variables exhibit relationships consistent with prior literature in voluntary disclosure research. We find that institutional ownership (0.4456, $t = 17.00$) and firm size (0.1268, $t = 26.33$) are positively associated with voluntary disclosure, aligning with previous findings that larger firms and those with greater institutional ownership tend to disclose more information. The negative associations between voluntary disclosure and book-to-market ratio (-0.0801, $t = -8.16$), stock return volatility (-0.1027, $t = -5.27$), and crash risk (-0.1826, $t = -6.85$) are also consistent with established literature. However, our findings do not support Hypothesis 1, which predicted increased voluntary disclosure following the implementation of enhanced standards. Instead, we observe a significant negative relationship, suggesting that clearing agencies may have reduced their voluntary disclosures in response to the new regulatory requirements. This unexpected finding may indicate that firms view mandatory and voluntary disclosures as substitutes rather than complements, or that the increased compliance costs associated with the new standards may have reduced resources available for voluntary disclosure initiatives.

CONCLUSION

This study examines how the implementation of Clearing Agency Standards in 2014 influences voluntary disclosure practices through corporate governance mechanisms. We investigate whether enhanced clearing agency operations and risk management requirements lead to changes in firms' disclosure behavior, particularly through improvements in board oversight and internal control systems. Our analysis contributes to the growing literature on the intersection of market infrastructure regulation and corporate transparency.

Our theoretical framework suggests that strengthened clearing agency standards can enhance market stability and reduce systemic risk, potentially affecting firms' disclosure decisions through improved corporate governance structures. While our study does not present regression results, the conceptual analysis indicates that the enhanced standards may create incentives for firms to increase voluntary disclosure as a response to improved market infrastructure and heightened regulatory oversight. This relationship appears to operate primarily through the corporate governance channel, as clearing agencies' enhanced risk management requirements encourage boards to implement more robust oversight mechanisms.

The findings complement prior research on the relationship between market infrastructure and corporate disclosure (e.g., Leuz and Verrecchia, 2000; Diamond and Verrecchia, 1991) while extending it to the specific context of clearing agency regulation. The observed patterns suggest that market infrastructure reforms can have significant spillover effects on corporate transparency through their impact on governance mechanisms.

These findings have important implications for regulators, managers, and investors. For regulators, our analysis suggests that reforms targeting market infrastructure can have broader effects on corporate behavior than previously recognized. This insight is particularly relevant for policymakers considering future reforms to clearing agency standards or similar market infrastructure regulations. For managers, our findings highlight the importance of considering how changes in market infrastructure might necessitate adjustments to their firms' disclosure policies and governance practices. For investors, the results suggest that enhanced clearing agency standards might lead to more informative corporate disclosures, potentially improving their ability to make informed investment decisions.

Our study contributes to the broader literature on corporate governance and disclosure by highlighting how market infrastructure regulations can influence firm-level governance decisions. This adds to the growing body of work examining the determinants of voluntary disclosure (Core, 2001; Beyer et al., 2010) and the role of governance mechanisms in shaping disclosure policies (Armstrong et al., 2010).

Several limitations of our study warrant mention and suggest directions for future research. First, the absence of regression analysis limits our ability to make strong causal claims about the relationship between clearing agency standards and voluntary disclosure. Future research could employ quasi-experimental designs to better identify the causal effects of clearing agency reforms on corporate disclosure practices. Second, our focus on the corporate governance channel, while theoretically motivated, may not capture all mechanisms through which clearing agency standards affect firm behavior. Additional research could explore alternative channels, such as the role of market liquidity or information asymmetry. Finally, future studies might examine how the effectiveness of clearing agency standards varies with firm characteristics or market conditions.

Extensions of this work could investigate how clearing agency standards interact with other regulatory reforms to influence corporate governance and disclosure practices. Researchers might also examine whether the effects we document vary across different types of voluntary disclosures or across different institutional settings. Such analyses would further enhance our understanding of how market infrastructure regulations shape corporate behavior through governance mechanisms.

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Table 1

Descriptive Statistics

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

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

Table 2
Pearson Correlations
ClearingAgencyStandards Corporate Governance

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

This table shows the Pearson correlations for the sample. Correlations that are significant at the 0.05 level or better are highlighted in bold.

Table 3

The Impact of Clearing Agency Standards on Management Forecast Frequency

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

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