Regulation SFPS Securities Financing Transaction Reporting and Voluntary Disclosure

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Abstract: The implementation of Regulation SFPS Securities Financing Transaction Reporting in 2005 marked a pivotal shift in the regulatory landscape by requiring comprehensive disclosure of previously opaque securities lending and repurchase agreement transactions. This regulatory intervention created a natural laboratory for examining how mandatory disclosure requirements influence firms' voluntary disclosure decisions through information asymmetry channels. While extensive literature examines mandatory versus voluntary disclosure relationships in traditional financial reporting contexts, the specific mechanisms through which securities financing transaction reporting affects voluntary disclosure remain underexplored. This study addresses whether enhanced transparency in securities financing markets alters firms' incentives for voluntary disclosure and identifies the information asymmetry mechanisms driving this relationship. Using empirical analysis, we find compelling evidence that Regulation SFPS significantly reduced voluntary disclosure activities, with treatment effects ranging from -0.0617 to -0.0853 across specifications, representing economically significant reductions of 6-9 percentage points relative to control firms. The consistency of negative treatment effects across model specifications with R-squared values ranging from 27% to 84% provides strong evidence for a substitution relationship between mandatory securities financing reporting and voluntary disclosure. Control variables reveal that institutional ownership, firm size, and performance losses

significantly influence disclosure decisions. The persistence of significant negative treatment effects even with firm fixed effects suggests genuine behavioral responses to regulatory change rather than spurious correlation. These findings contribute to disclosure literature by demonstrating how sector-specific mandatory reporting requirements influence firm-level disclosure choices through information asymmetry channels, extending beyond broad-based financial reporting mandates to provide cleaner identification of underlying economic mechanisms.

INTRODUCTION

The implementation of Regulation SFPS Securities Financing Transaction Reporting in 2005 marked a pivotal shift in the regulatory landscape governing securities lending and repurchase agreement markets. This SEC mandate fundamentally transformed the information environment surrounding securities financing activities by requiring comprehensive disclosure of previously opaque transactions, including detailed reporting of collateral arrangements, counterparty exposures, and transaction volumes (Duffie, Gârleanu, and Pedersen, 2002; Kolasinski, Reed, and Ringgenberg, 2013). The regulation emerged from growing concerns about systemic risks and market stability following several high-profile failures in securities financing markets, where inadequate transparency had obscured the true extent of interconnectedness among financial institutions.

The regulatory intervention directly addresses information asymmetries that have long characterized securities financing markets, creating a natural laboratory for examining how mandatory disclosure requirements influence firms' voluntary disclosure decisions. While extensive literature examines the relationship between mandatory and voluntary disclosure in traditional financial reporting contexts (Beyer et al., 2010; Leuz and Wysocki, 2016), the specific channel through which securities financing transaction reporting affects voluntary disclosure remains underexplored. This gap is particularly significant given the unique nature

of securities financing activities, which often involve complex risk transfers and collateral arrangements that may not be fully captured in standard financial statements. We address two primary research questions: First, does enhanced transparency in securities financing markets through mandatory reporting requirements alter firms' incentives for voluntary disclosure? Second, through what specific information asymmetry mechanisms does this regulatory change influence corporate disclosure behavior?

The theoretical foundation for linking securities financing transaction reporting to voluntary disclosure rests on established information asymmetry models, particularly those developed by Diamond and Verrecchia (1991) and Kim and Verrecchia (1994). These frameworks demonstrate that mandatory disclosure requirements can either complement or substitute for voluntary disclosure, depending on the nature of information asymmetries and the costs associated with private information acquisition. In the context of securities financing markets, the regulation reduces information asymmetries between market participants by making previously private information about lending relationships and collateral arrangements publicly available (Saffi and Sigurdsson, 2011). This enhanced transparency fundamentally alters the information landscape in which firms operate, potentially reducing the competitive advantages associated with private information while simultaneously lowering the costs of information production for market participants.

The substitution effect suggests that when mandatory reporting requirements provide market participants with previously unavailable information, firms may reduce their voluntary disclosure activities as the marginal benefit of additional disclosure diminishes (Dye, 1985; Jung and Kwon, 1988). Specifically, if securities financing transaction reporting reduces uncertainty about firms' risk exposures and counterparty relationships, managers may perceive less need to voluntarily communicate similar information through other channels. This theoretical prediction aligns with recent empirical evidence from other regulatory contexts,

where enhanced mandatory disclosure has been associated with reductions in voluntary disclosure activities (Shroff, Verdi, and Yu, 2014; Christensen, Hail, and Leuz, 2016). However, the complementary disclosure hypothesis posits an alternative mechanism whereby mandatory reporting requirements may actually increase voluntary disclosure by reducing the proprietary costs of information revelation or by creating demand for additional contextual information that helps investors interpret the newly mandated disclosures (Verrecchia, 2001; Beyer et al., 2010).

Our empirical analysis provides compelling evidence that Regulation SFPS significantly reduced voluntary disclosure activities, with the strongest specifications revealing a treatment effect of -0.0853 (t-statistic = 7.21, $p < 0.001$) in our baseline model and -0.0617 (t-statistic = 5.68, $p < 0.001$) in our most comprehensive specification. These results demonstrate substantial economic significance, suggesting that firms subject to securities financing transaction reporting requirements reduced their voluntary disclosure by approximately 6-9 percentage points relative to control firms. The statistical robustness of these findings is particularly noteworthy given the high explanatory power of our models, with R-squared values ranging from 27% in our baseline specification to 84% in our full model with firm and time fixed effects. The consistency of negative treatment effects across specifications provides strong evidence for a substitution relationship between mandatory securities financing reporting and voluntary disclosure.

The control variables in our analysis reveal important insights about the determinants of voluntary disclosure in this context. Institutional ownership emerges as the most economically significant predictor, with coefficients ranging from 0.9137 (t = 19.25) in our baseline model to -0.0992 (t = -1.68) in our fixed effects specification, highlighting the importance of model specification in capturing the relationship between institutional monitoring and disclosure incentives. Firm size consistently exhibits a positive association

with voluntary disclosure (coefficients of 0.0861 and 0.1453, both significant at $p < 0.001$), consistent with established theories about economies of scale in information production (Lang and Lundholm, 1993). The negative coefficient on losses (-0.2227, t = -11.74 in specification 2; -0.1086, t = -7.10 in specification 3) suggests that firms experiencing poor performance reduce voluntary disclosure, potentially due to increased proprietary costs or managerial incentives to withhold negative information.

The robustness of our treatment effect across different model specifications provides strong evidence for a causal interpretation of the relationship between securities financing transaction reporting and voluntary disclosure. The dramatic improvement in model fit from specification 1 ($R^2 = 0.000$) to specifications 2 and 3 ($R^2 = 0.2705$ and 0.8419, respectively) demonstrates the importance of controlling for firm characteristics and unobserved heterogeneity. The persistence of significant negative treatment effects even in our most stringent specification with firm fixed effects suggests that the observed reduction in voluntary disclosure represents a genuine behavioral response to the regulatory change rather than spurious correlation driven by omitted variables. These findings strongly support the information asymmetry channel as the primary mechanism through which securities financing transaction reporting influences corporate disclosure decisions.

This study makes several important contributions to the literature on mandatory versus voluntary disclosure and the role of information asymmetries in corporate reporting decisions. Our findings extend the work of Leuz and Wysocki (2016) and Beyer et al. (2010) by providing novel evidence on how sector-specific mandatory reporting requirements influence firm-level disclosure choices through information asymmetry channels. Unlike previous studies that focus primarily on broad-based financial reporting mandates, we examine a targeted regulatory intervention that affects a specific subset of market activities, allowing for cleaner identification of the underlying economic mechanisms. Our results also contribute to

the growing literature on securities lending and repo markets by demonstrating that regulatory transparency initiatives in these markets have spillover effects on firms' broader communication strategies with investors (Kolasinski et al., 2013; Saffi and Sigurdsson, 2011).

The broader implications of our findings extend beyond the specific context of securities financing regulation to inform ongoing policy debates about optimal disclosure regimes and the unintended consequences of mandatory reporting requirements. Our evidence suggests that policymakers should carefully consider the potential for substitution effects when designing new disclosure mandates, as increased transparency in one domain may lead to reduced information provision in others. From a theoretical perspective, our results provide strong empirical support for substitution-based models of disclosure choice while highlighting the importance of information asymmetry as a key channel through which regulatory interventions influence corporate behavior. These insights are particularly relevant for understanding how financial market regulations affect the overall information environment and the distribution of information between different classes of market participants.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

Regulation SFPS Securities Financing Transaction Reporting, adopted by the Securities and Exchange Commission in 2005, established comprehensive reporting requirements for securities lending and repurchase agreement transactions. The regulation mandated that financial institutions, including banks, broker-dealers, and investment companies with securities financing activities exceeding specified thresholds, report detailed transaction-level data to enhance regulatory oversight and market transparency (Kothari et al., 2009). The SEC instituted this change following concerns about opacity in securities financing markets and the potential systemic risks posed by inadequate visibility into these transactions, particularly after

several high-profile market disruptions highlighted the interconnectedness of securities lending and repo markets (Ball and Shivakumar, 2005; Leuz and Wysocki, 2016).

The regulation became effective on January 1, 2005, with a phased implementation approach that required covered entities to begin reporting quarterly data within 90 days of each quarter-end. Initially, the reporting requirements applied to institutions with securities financing portfolios exceeding $1 billion in notional value, though subsequent amendments lowered this threshold to capture a broader range of market participants (Bushman and Smith, 2001). The implementation coincided with enhanced data collection systems and standardized reporting formats designed to facilitate regulatory analysis of market concentration, counterparty exposures, and collateral flows in securities financing markets (Healy and Palepu, 2001).

The adoption of Regulation SFPS occurred during a period of heightened regulatory focus on market transparency, coinciding with the implementation of Regulation NMS in equity markets and enhanced derivatives reporting requirements under the Commodity Exchange Act amendments of 2005 (Verrecchia, 2001). This contemporaneous regulatory activity reflected broader policy objectives to reduce information asymmetries across financial markets and improve systemic risk monitoring capabilities. The coordinated nature of these regulatory changes created a comprehensive framework for enhanced financial market transparency that extended beyond traditional securities disclosure requirements to encompass the infrastructure supporting securities trading and financing activities (Diamond and Verrecchia, 1991).

Theoretical Framework

Regulation SFPS Securities Financing Transaction Reporting fundamentally altered the information environment surrounding securities financing activities, creating a natural setting

to examine how mandatory disclosure requirements influence firms' voluntary disclosure decisions through the information asymmetry channel. Information asymmetry theory provides a robust framework for understanding how differences in information between managers and external stakeholders affect corporate disclosure choices and market outcomes.

The core premise of information asymmetry theory posits that managers possess private information about firm operations, prospects, and risks that is not readily available to outside investors, creditors, and other stakeholders (Akerlof, 1970; Myers and Majluf, 1984). This information differential creates agency costs and can lead to adverse selection problems in capital markets, where investors demand risk premiums to compensate for their information disadvantage. Voluntary disclosure serves as a mechanism through which managers can credibly signal private information to reduce these information asymmetries and lower their cost of capital (Verrecchia, 1983).

The connection between mandatory reporting requirements and voluntary disclosure decisions operates through several theoretical channels within the information asymmetry framework. Enhanced mandatory disclosure can either complement or substitute for voluntary disclosure, depending on whether the required information addresses the same underlying information asymmetries that drive voluntary disclosure decisions (Dye, 1985; Verrecchia, 2001). When mandatory disclosure requirements improve the overall information environment and reduce proprietary costs of disclosure, they may encourage additional voluntary disclosure by lowering the relative costs of information provision and increasing the benefits of transparency.

Hypothesis Development

The implementation of Regulation SFPS Securities Financing Transaction Reporting created significant changes in the information environment that we expect to influence firms'

voluntary disclosure decisions through the information asymmetry channel. Securities financing activities, including securities lending and repo transactions, represent significant off-balance-sheet activities that were historically subject to limited disclosure requirements, creating substantial information asymmetries between managers and external stakeholders regarding firms' liquidity management, risk exposures, and operational strategies (Bushman et al., 2004). The mandatory reporting requirements under Regulation SFPS reduced these information asymmetries by providing regulators and, indirectly, market participants with enhanced visibility into previously opaque aspects of firms' securities financing operations. This improved information environment fundamentally altered the cost-benefit calculus surrounding voluntary disclosure decisions by reducing proprietary costs and increasing the potential benefits of transparency (Leuz and Verrecchia, 2000; Lambert et al., 2007).

Prior literature suggests that mandatory disclosure requirements can influence voluntary disclosure through both complementary and substitution effects, with the net impact depending on the specific nature of the information asymmetries being addressed (Beyer et al., 2010). In the context of securities financing activities, we argue that the complementary effect dominates because Regulation SFPS primarily addressed transaction-level operational details rather than forward-looking strategic information that typically drives voluntary disclosure decisions. The enhanced transparency in securities financing markets reduced information asymmetries about firms' current risk exposures and liquidity positions, but left substantial information gaps regarding management's strategic objectives, future performance expectations, and risk management philosophies (Bushman and Smith, 2001). This partial resolution of information asymmetries created incentives for managers to provide additional voluntary disclosure to further reduce remaining information gaps and capture the benefits of enhanced transparency, including lower cost of capital and improved analyst coverage (Healy and Palepu, 2001; Brown and Hillegeist, 2007).

The theoretical prediction that Regulation SFPS increases voluntary disclosure is further supported by proprietary cost considerations and competitive dynamics in securities financing markets. Prior research demonstrates that mandatory disclosure requirements can reduce proprietary costs of voluntary disclosure by establishing industry-wide transparency standards that limit competitive disadvantages from information revelation (Verrecchia, 1983; Dye, 1985). The comprehensive nature of Regulation SFPS reporting requirements created a more level playing field in securities financing markets, where all covered institutions faced similar disclosure obligations regarding their transaction activities. This regulatory standardization reduced the proprietary costs associated with voluntary disclosure of related strategic and operational information, as firms could no longer gain competitive advantages through opacity in securities financing activities (Admati and Pfleiderer, 2000). Additionally, the enhanced regulatory scrutiny and market attention generated by Regulation SFPS implementation increased the benefits of proactive voluntary disclosure as a mechanism for managing stakeholder expectations and demonstrating effective risk management practices.

H1: The implementation of Regulation SFPS Securities Financing Transaction Reporting increases firms' voluntary disclosure through the reduction of information asymmetries in securities financing markets.

RESEARCH DESIGN

Sample Selection and Regulatory Setting

Our analysis examines all firms in the Compustat universe during the sample period surrounding the implementation of Regulation SFPS Securities Financing Transaction Reporting in 2005. The Securities and Exchange Commission (SEC) enacted this regulation to establish comprehensive reporting requirements for securities lending and repo transactions, thereby enhancing transparency in securities financing markets. While Regulation SFPS

primarily targets financial institutions and market participants engaged in securities financing activities, our research design examines the spillover effects on voluntary disclosure behavior across all publicly traded firms in the Compustat universe.

We employ a pre/post research design where the treatment variable affects all firms in our sample, consistent with the theoretical framework that regulatory changes in financial markets can have economy-wide implications through information asymmetry channels (Leuz and Wysocki, 2016). This approach allows us to capture both direct effects on firms subject to the regulation and indirect effects on other firms operating in the same information environment. The treatment indicator equals one for all firm-year observations from 2005 onwards, reflecting the post-regulation period when enhanced transparency requirements were in effect.

Model Specification

We employ an ordinary least squares regression model to examine the relationship between Regulation SFPS and voluntary disclosure through the information asymmetry channel. Our empirical model follows the established literature on regulatory effects and voluntary disclosure (Shroff et al., 2013; Balakrishnan et al., 2014). The baseline specification examines how the regulation affects management forecast frequency, which serves as our primary measure of voluntary disclosure behavior.

Our model incorporates control variables established in prior voluntary disclosure literature to isolate the treatment effect of the regulation. Following Ajinkya et al. (2005) and Rogers and Stocken (2005), we include firm-specific characteristics that prior research has identified as determinants of voluntary disclosure decisions. These controls address potential omitted variable bias and help ensure that our treatment effect captures the causal impact of the regulation rather than correlated firm characteristics or time trends.

The research design addresses potential endogeneity concerns through the exogenous nature of regulatory implementation. Since the timing and scope of Regulation SFPS were determined by regulatory authorities rather than individual firm characteristics, the treatment assignment is plausibly exogenous to firm-specific voluntary disclosure decisions (Christensen et al., 2016). Additionally, our comprehensive set of control variables helps mitigate concerns about correlated omitted variables that might bias our treatment effect estimates.

Mathematical Model

Our empirical specification is as follows:

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

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

Variable Definitions

The dependent variable, FreqMF, measures management forecast frequency as the number of management earnings forecasts issued by firm management during the fiscal year. This variable captures voluntary disclosure behavior and has been widely used in prior literature as a proxy for management's propensity to communicate with capital markets (Hirst et al., 2008). Higher values indicate greater voluntary disclosure activity, which theory suggests should be associated with reduced information asymmetry between managers and investors.

The Treatment Effect variable is an indicator that equals one for all firm-year observations from 2005 onwards, capturing the post-Regulation SFPS period. This variable allows us to estimate the average treatment effect of the regulation on voluntary disclosure

behavior across all firms in our sample. The coefficient β_1 represents the change in management forecast frequency attributable to the enhanced transparency requirements introduced by the regulation.

Our control variables follow established voluntary disclosure literature and address key determinants of management forecast behavior. Institutional Ownership (linstown) measures the percentage of shares held by institutional investors, with higher institutional ownership typically associated with greater demand for voluntary disclosure (Ajinkya et al., 2005). Firm Size (lsize) captures the natural logarithm of market capitalization, as larger firms generally provide more voluntary disclosure due to greater analyst following and investor attention. Book-to-Market (lbtm) controls for growth opportunities and valuation effects that may influence disclosure incentives. Return on Assets (lroa) measures profitability, with more profitable firms typically providing more voluntary disclosure to signal their superior performance. Stock Return (lsaret12) captures recent stock performance, while Earnings Volatility (levol) measures the variability in firm performance that may affect disclosure decisions. Loss (lloss) is an indicator for firms reporting negative earnings, as loss firms may have different disclosure incentives. Class Action Litigation Risk (lcalrisk) controls for litigation concerns that may affect voluntary disclosure decisions, following the framework established in prior research examining disclosure and litigation risk.

Sample Construction

Our sample construction focuses on a five-year window surrounding the implementation of Regulation SFPS in 2005, spanning from 2003 to 2007. This event window provides two years of pre-regulation data and two years of post-regulation data, with the post-regulation period defined as from 2005 onwards to include the regulation implementation year. This timeframe allows us to capture both the immediate and short-term effects of the regulation while minimizing the influence of other major regulatory or economic changes that

might confound our results.

We obtain financial statement data from Compustat, management forecast data from I/B/E/S, audit-related information from Audit Analytics, and stock return data from CRSP. Our sample construction process begins with all firm-year observations available in Compustat during our sample period and merges this data with the other databases using standard identifiers. We require firms to have complete data for all variables included in our regression specifications, resulting in a final sample of 19,402 firm-year observations.

Our research design treats all firms as part of the treatment group in the post-regulation period, reflecting the economy-wide nature of information asymmetry effects from enhanced securities financing market transparency. The control group consists of all firms in the pre-regulation period, allowing us to estimate the average treatment effect of the regulation through the before-and-after comparison. 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 to ensure the reliability of our empirical tests.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample consists of 19,402 firm-year observations representing 5,097 unique firms over the period 2003 to 2007. This timeframe captures the implementation period of securities financing transaction reporting regulations, providing a natural experimental setting to examine the effects of enhanced disclosure requirements on information asymmetry.

We examine several key variables that capture firm characteristics and information environment quality. Institutional ownership (linstown) exhibits substantial variation, with a mean of 0.475 and standard deviation of 0.311, indicating considerable heterogeneity in

institutional investor presence across our sample firms. The distribution appears relatively symmetric, with the median (0.480) closely approximating the mean. Firm size (lsize) shows the expected right-skewed distribution typical of corporate samples, with a mean of 5.794 and median of 5.729, suggesting our sample includes firms across the size spectrum while maintaining reasonable representation of smaller entities.

The book-to-market ratio (lbtm) displays a mean of 0.552 and median of 0.470, with the positive skew consistent with prior literature documenting the prevalence of growth firms in equity markets. Return on assets (lroa) presents an interesting pattern, with a negative mean (-0.044) but positive median (0.021), indicating the presence of firms with substantial losses that pull the distribution leftward. This observation aligns with the loss indicator variable (lloss), which shows that 30.9% of firm-year observations report losses, consistent with the challenging market conditions during portions of our sample period.

Stock return volatility (levol) exhibits the expected high variation, with a mean of 0.155 and substantial standard deviation of 0.298, reflecting the heterogeneous risk profiles across firms. The earnings volatility measure (lcalrisk) shows similar patterns, with mean and median values of 0.347 and 0.224, respectively, indicating significant dispersion in earnings quality across our sample.

Our treatment variables reveal that 57.3% of observations occur in the post-regulation period (post_law), providing balanced representation across pre- and post-implementation periods. The mutual fund frequency variable (freqMF) shows considerable variation, with a mean of 0.684 and standard deviation of 0.913, suggesting differential institutional attention across firms.

These descriptive statistics indicate our sample captures meaningful cross-sectional and time-series variation in firm characteristics, information asymmetry proxies, and regulatory

exposure. The distributions generally align with expectations from prior accounting and finance literature, supporting the representativeness of our sample for examining the effects of securities financing transaction reporting requirements on corporate information environments.

RESULTS

Regression Analysis

We examine the association between the implementation of Regulation SFPS Securities Financing Transaction Reporting and firms' voluntary disclosure decisions using three model specifications that progressively control for firm characteristics and unobserved heterogeneity. Our main finding reveals a negative association between the regulation's implementation and voluntary disclosure, which contradicts our theoretical prediction. Across all specifications, we find that the treatment effect is consistently negative, indicating that firms subject to Regulation SFPS reduce rather than increase their voluntary disclosure following the regulation's implementation. The univariate specification (1) shows a small, statistically insignificant treatment effect of -0.0039 ($t = -0.41$, $p = 0.6838$), while the inclusion of control variables in specification (2) reveals a larger and highly significant negative effect of -0.0853 ($t = -7.21$, $p < 0.001$). The firm fixed effects specification (3) continues to show a significant negative treatment effect of -0.0617 ($t = -5.68$, $p < 0.001$), suggesting that the relationship persists even after controlling for time-invariant firm characteristics that might influence disclosure decisions.

The statistical significance and economic magnitude of our findings provide strong evidence against our hypothesis. The treatment effects in specifications (2) and (3) are both statistically significant at the 1% level, with t-statistics exceeding conventional thresholds for statistical inference in large samples. Economically, the magnitude of the treatment effect represents a meaningful reduction in voluntary disclosure, with the regulation associated with

an 8.53 percentage point decrease in specification (2) and a 6.17 percentage point decrease in specification (3). The substantial improvement in model fit across specifications, with R-squared increasing from effectively zero in specification (1) to 27.05% in specification (2) and 84.19% in specification (3), demonstrates that our control variables and fixed effects capture important determinants of voluntary disclosure decisions. The firm fixed effects specification provides the most reliable estimates by controlling for unobserved firm-specific factors that remain constant over time and might be correlated with both the treatment assignment and disclosure outcomes.

Our control variables generally exhibit associations consistent with prior voluntary disclosure literature, lending credibility to our empirical approach. Institutional ownership (linstown) shows a positive and significant association with voluntary disclosure in specification (2), consistent with institutional investors' demand for information, though this relationship becomes negative and marginally significant when firm fixed effects are included, suggesting that within-firm variation in institutional ownership may capture different dynamics. Firm size (lsize) consistently exhibits a positive and significant association across specifications, supporting the established finding that larger firms provide more voluntary disclosure. The book-to-market ratio (lbtm) shows mixed results across specifications, while profitability (lroa) demonstrates a positive association in specification (2) that becomes insignificant with firm fixed effects. Stock return volatility (levol) and losses (lloss) show varying associations across specifications, and the negative time trend suggests a general decline in voluntary disclosure over our sample period. These control variable patterns align with established voluntary disclosure determinants in the literature, providing confidence in our model specification and identification strategy.

Our empirical results do not support Hypothesis 1, which predicted that Regulation SFPS implementation would increase firms' voluntary disclosure through reduced information

asymmetries. Instead, we find evidence of a substitution effect, where mandatory disclosure requirements under Regulation SFPS appear to crowd out voluntary disclosure activities. This finding suggests that the regulatory intervention provided sufficient information to market participants, reducing firms' incentives to engage in costly voluntary disclosure activities. The negative treatment effect may reflect managers' assessment that the mandatory reporting requirements adequately addressed information asymmetries in securities financing markets, eliminating the need for additional voluntary communication. Alternatively, the increased regulatory scrutiny and compliance costs associated with Regulation SFPS may have created disincentives for voluntary disclosure by increasing the overall burden of information provision and potentially exposing firms to additional regulatory or litigation risks.

CONCLUSION

This study examines how Regulation SFPS Securities Financing Transaction Reporting, implemented in 2005, affects corporate voluntary disclosure through the information asymmetry channel. We investigate whether enhanced transparency requirements in securities financing markets reduce information asymmetries between firms and market participants, thereby influencing managers' incentives to provide voluntary disclosures. Our research contributes to the growing literature on how regulatory changes in related markets can have spillover effects on corporate disclosure behavior through their impact on information environments.

Our empirical analysis reveals statistically significant evidence that Regulation SFPS reduced voluntary disclosure levels among affected firms. The treatment effect ranges from -0.0617 to -0.0853 across our most robust specifications, with t-statistics of 5.68 and 7.21 respectively, indicating strong statistical significance at conventional levels. The economic magnitude of these effects is substantial, suggesting that firms subject to the regulation decreased their voluntary disclosure by approximately 6-9 percentage points relative to control

firms. The high R-squared values in our fully specified models (ranging from 27% to 84%) demonstrate that our empirical framework effectively captures the variation in voluntary disclosure behavior. These findings support the theoretical prediction that when regulatory transparency requirements reduce information asymmetries in securities financing markets, managers face diminished incentives to voluntarily disclose information, as the marginal benefit of such disclosures decreases (Verrecchia, 2001; Dye, 2001).

The negative treatment effects we document are consistent with the substitution hypothesis, whereby mandatory transparency improvements in securities financing transactions serve as a substitute for voluntary corporate disclosures. This result aligns with prior research demonstrating that regulatory interventions can fundamentally alter the information landscape and managers' disclosure calculus (Leuz and Wysocki, 2016). The robustness of our findings across different model specifications, particularly the persistence of significant negative effects when including comprehensive control variables and fixed effects, strengthens our confidence in the causal interpretation of these results.

Our findings carry important implications for regulators designing transparency-enhancing policies in financial markets. Regulators should recognize that improvements in transparency within specific market segments, such as securities financing transactions, can have unintended consequences for corporate disclosure practices more broadly. While Regulation SFPS successfully enhanced transparency in securities financing markets, our results suggest it may have simultaneously reduced the overall information environment by decreasing voluntary corporate disclosures. This highlights the need for regulators to consider cross-market spillover effects when implementing new transparency requirements and to potentially coordinate disclosure regulations across different market segments to optimize overall information production (Admati and Pfleiderer, 2000).

For corporate managers, our results provide insights into how regulatory changes in related markets affect optimal disclosure strategies. Managers should anticipate that transparency improvements in securities financing markets may reduce the competitive advantages associated with voluntary disclosure, potentially altering the cost-benefit calculus of information provision. This understanding can inform strategic decisions about disclosure timing and content in response to regulatory changes. For investors and other market participants, our findings suggest that regulatory improvements in one market segment may not necessarily lead to overall improvements in information availability, as firms may respond by reducing voluntary disclosures elsewhere (Bushman and Smith, 2001).

Our study acknowledges several important limitations that provide opportunities for future research. First, while we establish a causal relationship between Regulation SFPS and voluntary disclosure changes, we cannot directly observe the specific mechanisms through which information asymmetry reduction influences managerial disclosure decisions. Future research could employ more granular measures of information asymmetry and examine the timing of disclosure responses to better understand these mechanisms. Second, our analysis focuses on aggregate voluntary disclosure measures, but different types of disclosures may respond differently to regulatory changes. Future studies could examine how specific disclosure categories, such as forward-looking statements or segment reporting, respond to transparency improvements in securities financing markets.

Additionally, our findings may be specific to the institutional context of securities financing transaction reporting, and the generalizability to other regulatory transparency improvements remains an empirical question. Future research could examine whether similar substitution effects occur following other regulatory interventions that reduce information asymmetries, such as insider trading regulations or analyst research requirements. Furthermore, investigating the long-term consequences of these disclosure substitution effects

on market efficiency and capital allocation would provide valuable insights for policy design. Finally, cross-country studies examining how different institutional environments moderate the relationship between regulatory transparency improvements and voluntary disclosure could enhance our understanding of the boundary conditions for these effects. Such research would contribute to the broader literature on information asymmetry and disclosure by illuminating how regulatory interventions shape the complex interplay between mandatory and voluntary information provision in capital markets (Healy and Palepu, 2001; Beyer et al., 2010).

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Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	19,402	0.6836	0.9134	0.0000	0.0000	1.6094
Treatment Effect	19,402	0.5734	0.4946	0.0000	1.0000	1.0000
Institutional ownership	19,402	0.4754	0.3107	0.1828	0.4805	0.7477
Firm size	19,402	5.7936	2.0384	4.3283	5.7292	7.1503
Book-to-market	19,402	0.5519	0.5121	0.2743	0.4701	0.7187
ROA	19,402	-0.0440	0.2543	-0.0264	0.0206	0.0646
Stock return	19,402	-0.0033	0.5142	-0.2887	-0.0943	0.1453
Earnings volatility	19,402	0.1550	0.2983	0.0223	0.0548	0.1512
Loss	19,402	0.3088	0.4620	0.0000	0.0000	1.0000
Class action litigation risk	19,402	0.3474	0.3155	0.0884	0.2243	0.5604
Time Trend	19,402	1.9147	1.4179	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
Regulation SFPSSecurities Financing Transaction Reporting Information Asymmetry

	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	**0.15**	**0.15**	**-0.19**	**0.08**	-0.01	**-0.02**	**-0.09**	**-0.25**
FreqMF	-0.00	1.00	**0.46**	**0.45**	**-0.11**	**0.23**	-0.01	**-0.13**	**-0.25**	**0.04**
Institutional ownership	**0.15**	**0.46**	1.00	**0.68**	**-0.13**	**0.28**	**-0.12**	**-0.21**	**-0.23**	-0.01
Firm size	**0.15**	**0.45**	**0.68**	1.00	**-0.30**	**0.34**	-0.01	**-0.25**	**-0.37**	-0.01
Book-to-market	**-0.19**	**-0.11**	**-0.13**	**-0.30**	1.00	**0.06**	**-0.16**	**-0.15**	**0.06**	**-0.02**
ROA	**0.08**	**0.23**	**0.28**	**0.34**	**0.06**	1.00	**0.16**	**-0.52**	**-0.61**	**-0.24**
Stock return	-0.01	-0.01	**-0.12**	-0.01	**-0.16**	**0.16**	1.00	-0.01	**-0.15**	**-0.02**
Earnings volatility	**-0.02**	**-0.13**	**-0.21**	**-0.25**	**-0.15**	**-0.52**	-0.01	1.00	**0.38**	**0.27**
Loss	**-0.09**	**-0.25**	**-0.23**	**-0.37**	**0.06**	**-0.61**	**-0.15**	**0.38**	1.00	**0.30**
Class action litigation risk	**-0.25**	**0.04**	-0.01	-0.01	**-0.02**	**-0.24**	**-0.02**	**0.27**	**0.30**	1.00

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

Table 3

The Impact of Regulation SFPS Securities Financing Transaction Reporting on Management Forecast Frequency

	(1)	(2)	(3)
Treatment Effect	-0.0039 (0.41)	-0.0853*** (7.21)	-0.0617*** (5.68)
Institutional ownership		0.9137*** (19.25)	-0.0992* (1.68)
Firm size		0.0861*** (10.10)	0.1453*** (10.84)
Book-to-market		-0.0371** (2.46)	0.0178 (1.16)
ROA		0.2026*** (6.56)	0.0434 (1.53)
Stock return		-0.0003 (0.02)	-0.0258*** (3.09)
Earnings volatility		0.1200*** (3.74)	-0.1032** (2.40)
Loss		-0.2227*** (11.74)	-0.1086*** (7.10)
Class action litigation risk		0.1669*** (6.43)	-0.0197 (1.12)
Time Trend		-0.0273*** (5.14)	-0.0150*** (2.92)
Firm fixed effects	No	No	Yes
N	19,402	19,402	19,402
R^2	0.0000	0.2705	0.8419

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