

Municipal Advisor Fiduciary Duty Standards and Voluntary Disclosure

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Abstract: The Municipal Advisor Fiduciary Duty Standards, implemented by the SEC in 2011, represent a pivotal regulatory intervention that fundamentally altered incentive structures governing advisory relationships between financial intermediaries and municipal entities by establishing explicit fiduciary obligations requiring advisors to act in clients' best interests. This regulation emerged following widespread concerns about conflicts of interest and inadequate protection for municipal issuers, creating heightened reputational consequences for advisors failing to meet fiduciary obligations. This study addresses a critical gap in literature by examining whether fiduciary duty standards systematically altered voluntary disclosure patterns among municipal entities through the reputation risk channel, where enhanced regulatory scrutiny incentivizes advisors to encourage transparent disclosure practices as reputational insurance. Building on signaling theory and disclosure economics, we predicted that enhanced fiduciary obligations would increase voluntary disclosure as advisors internalize transparency benefits to protect against regulatory sanctions. However, competing theories suggest increased oversight might lead to more cautious disclosure strategies due to liability concerns. Our empirical analysis reveals statistically significant but economically complex effects, with baseline specifications showing positive treatment effects that become negative when comprehensive controls are incorporated. The most robust specification with firm fixed effects confirms a negative treatment effect of -0.0186, achieving 90.27%

explanatory power and indicating that fiduciary duty standards reduced voluntary disclosure through channels operating independently of standard firm characteristics. These findings challenge conventional wisdom about fiduciary standards and transparency, suggesting liability concerns may dominate reputation risk mechanisms, with important implications for optimal fiduciary duty design and regulatory policy.

INTRODUCTION

The Municipal Advisor Fiduciary Duty Standards, implemented by the SEC in 2011, represent a pivotal regulatory intervention in the municipal securities market that fundamentally altered the incentive structure governing advisory relationships between financial intermediaries and municipal entities. This regulation established explicit fiduciary obligations for municipal advisors, requiring them to act in the best interests of their municipal clients and to provide suitable advice based on the specific circumstances of each engagement (Schwarcz, 2014; Rose, 2016). The regulatory framework emerged in response to widespread concerns about conflicts of interest and inadequate protection for municipal issuers, particularly following high-profile cases of municipal financial distress where advisory relationships were scrutinized for potential misconduct (Ang and Green, 2011). By imposing heightened legal and professional standards, the regulation created a new landscape where municipal advisors face significantly elevated reputational consequences for failing to meet their fiduciary obligations.

The reputation risk channel represents a particularly compelling mechanism through which the Municipal Advisor Fiduciary Duty Standards may influence corporate voluntary disclosure practices. When municipal advisors face enhanced regulatory scrutiny and potential reputational damage from fiduciary breaches, they develop stronger incentives to encourage their municipal clients to adopt more transparent disclosure practices as a form of reputational insurance (Healy and Palepu, 2001; Beyer et al., 2010). However, existing literature provides

limited empirical evidence on how regulatory changes affecting intermediary reputation risk translate into measurable changes in voluntary disclosure behavior by the entities they advise. This study addresses a critical gap by examining whether the implementation of fiduciary duty standards for municipal advisors systematically altered voluntary disclosure patterns among municipal entities through the reputation risk channel. We investigate two primary research questions: First, did the Municipal Advisor Fiduciary Duty Standards lead to measurable changes in voluntary disclosure practices among municipal entities? Second, can observed changes in disclosure behavior be attributed to the reputation risk mechanism affecting municipal advisors?

The economic mechanism linking the Municipal Advisor Fiduciary Duty Standards to voluntary disclosure operates through the reputation risk channel, where regulatory changes alter the cost-benefit calculus for both advisors and their municipal clients. Prior research demonstrates that reputation concerns serve as powerful motivators for enhanced disclosure quality, as market participants seek to signal their commitment to transparency and reduce information asymmetries (Diamond and Verrecchia, 1991; Dye, 1985). When fiduciary duty standards increase the potential reputational costs of inadequate advisory services, municipal advisors develop stronger incentives to recommend comprehensive disclosure strategies that protect both their clients and their own professional standing. This mechanism aligns with theoretical frameworks suggesting that intermediary reputation risk can create positive externalities for information production and dissemination (Chemmanur and Fulghieri, 1994; Mathis et al., 2009).

Building on signaling theory and the economics of disclosure, we predict that the implementation of Municipal Advisor Fiduciary Duty Standards should lead to increased voluntary disclosure through the reputation risk channel. The theoretical foundation rests on the premise that enhanced fiduciary obligations create reputational stakes for municipal

advisors, who then internalize the benefits of encouraging client transparency as a form of insurance against potential regulatory sanctions or professional censure (Milgrom and Roberts, 1986; Admati and Pfleiderer, 2000). Municipal advisors facing heightened reputation risk should systematically recommend more comprehensive disclosure practices to their clients, both to demonstrate due diligence in their advisory capacity and to reduce the likelihood of future disputes or regulatory investigations. This prediction is consistent with established theories of voluntary disclosure that emphasize the role of intermediaries in facilitating information transmission between firms and capital markets (Bushman and Smith, 2001; Armstrong et al., 2010).

However, competing theoretical perspectives suggest that the relationship between fiduciary duty standards and voluntary disclosure may be more complex than a simple positive association. Some theoretical models predict that increased regulatory oversight might lead to more cautious disclosure strategies, as advisors and their clients become concerned about potential liability from forward-looking statements or sensitive information (Skinner, 1994; Johnson et al., 2001). Additionally, if fiduciary duty standards primarily affect the quality rather than the quantity of advisory services, the impact on voluntary disclosure might manifest through improved disclosure quality rather than increased disclosure frequency. These competing theoretical predictions underscore the importance of empirical investigation to determine the net effect of the Municipal Advisor Fiduciary Duty Standards on voluntary disclosure practices through the reputation risk channel.

Our empirical analysis reveals statistically significant but economically complex effects of the Municipal Advisor Fiduciary Duty Standards on voluntary disclosure practices. In our baseline specification without control variables, we find a positive treatment effect of 0.0641 (t-statistic = 7.17, $p < 0.001$), suggesting that the regulation initially increased voluntary disclosure consistent with the reputation risk mechanism. However, this

specification explains only 0.13% of the variation in disclosure practices, indicating that the unconditional effect, while statistically significant, captures a relatively small portion of the underlying disclosure dynamics. The low explanatory power suggests that firm-specific characteristics and other economic factors play dominant roles in determining voluntary disclosure decisions, highlighting the importance of controlling for these variables in subsequent specifications.

When we incorporate comprehensive control variables in our second specification, the treatment effect becomes negative and statistically significant at -0.0219 (t -statistic = 2.00, p = 0.046), with the model's explanatory power increasing dramatically to 23.81%. This reversal suggests that the apparent positive effect in the baseline specification was confounded by omitted variables that correlate with both the treatment and disclosure outcomes. The control variables reveal economically intuitive patterns: institutional ownership (coefficient = 0.5646, t = 12.29) and firm size (coefficient = 0.1162, t = 12.51) emerge as the strongest predictors of voluntary disclosure, consistent with established literature on disclosure determinants. Firms with losses (coefficient = -0.1577, t = -7.86) and higher California risk exposure (coefficient = -0.1664, t = -5.82) exhibit significantly lower disclosure propensity, while firms with higher book-to-market ratios and recent negative stock returns also disclose less frequently.

Our most comprehensive specification, including firm fixed effects, confirms the negative treatment effect of -0.0186 (t -statistic = 2.03, p = 0.043) while achieving an R-squared of 90.27%, indicating that the model captures the vast majority of variation in disclosure practices. The inclusion of firm fixed effects substantially reduces the magnitude of most control variable coefficients, suggesting that much of their explanatory power operates through time-invariant firm characteristics. Notably, the institutional ownership effect diminishes to 0.0602 (t = 2.08), while firm size remains significant at 0.0484 (t = 4.84), indicating that within-firm variation in size continues to predict disclosure changes over time.

The persistence of the negative treatment effect across specifications with increasingly comprehensive controls provides robust evidence that the Municipal Advisor Fiduciary Duty Standards reduced voluntary disclosure through channels that operate independently of standard firm characteristics, potentially reflecting increased caution in disclosure practices due to heightened liability concerns rather than the hypothesized reputation risk mechanism.

This study contributes to several streams of literature by providing the first comprehensive empirical examination of how fiduciary duty regulations affecting financial intermediaries influence corporate voluntary disclosure practices. Our findings extend the work of Schwarcz (2014) and Rose (2016) on municipal advisor regulation by demonstrating measurable effects on client disclosure behavior, while also contributing to the broader literature on regulatory spillovers in financial markets (Agarwal et al., 2014; Dranove et al., 2003). The negative treatment effect we document challenges conventional wisdom about the relationship between enhanced fiduciary standards and transparency, suggesting that reputation risk mechanisms may be dominated by liability concerns in certain regulatory contexts. Our results also contribute to the voluntary disclosure literature by identifying a novel channel through which regulatory changes can influence disclosure decisions, complementing existing research on direct disclosure mandates and their effects (Leuz and Wysocki, 2016; Christensen et al., 2016).

The broader implications of our findings extend beyond the specific context of municipal advisor regulation to inform ongoing debates about the optimal design of fiduciary duty standards and their unintended consequences. Our evidence suggests that policymakers should carefully consider how enhanced liability regimes might create incentives for reduced rather than increased transparency, particularly when reputation risk channels interact with litigation risk in complex ways. The substantial explanatory power of our comprehensive models also contributes methodologically to the disclosure literature by demonstrating the

importance of controlling for firm-specific factors when evaluating regulatory interventions. These findings have practical implications for regulators designing future fiduciary duty standards and for municipal entities seeking to understand how advisory relationships affect their disclosure strategies in an evolving regulatory environment.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Municipal Advisor Fiduciary Duty Standards, established by the Securities and Exchange Commission (SEC) in 2011 as part of the Dodd-Frank Wall Street Reform and Consumer Protection Act, fundamentally transformed the regulatory landscape governing municipal securities markets. This regulation emerged in response to widespread concerns about conflicts of interest and inadequate investor protection in municipal bond markets, particularly following high-profile cases where municipal advisors prioritized their own financial interests over those of their municipal clients (Doty and Powers, 2011; Schwarcz, 2012). The rule specifically targets municipal advisors who provide advice to municipal entities regarding municipal financial products or the issuance of municipal securities, requiring them to register with the SEC and adhere to strict fiduciary duty standards that mandate acting in the best interests of their municipal clients (Butler, 2013).

The regulation became effective on October 1, 2011, with a phased implementation approach that required municipal advisors to register by October 1, 2012. The rule applies broadly to any person who provides advice to municipal entities or obligated persons regarding municipal financial products or municipal securities issuances, including investment advisors, financial consultants, and third-party marketers who solicit municipal entities on behalf of investment advisers (Ang and Green, 2011; Cornaggia et al., 2014). The SEC instituted these changes to address market failures in municipal securities markets, where information

asymmetries and conflicts of interest had previously led to suboptimal outcomes for municipal issuers and, ultimately, taxpayers who bear the costs of municipal financing decisions (Schwert, 2011).

The implementation of Municipal Advisor Fiduciary Duty Standards occurred alongside several other significant securities law reforms during this period, including the Volcker Rule and enhanced derivatives regulations under Dodd-Frank. However, the municipal advisor rules were among the first Dodd-Frank provisions to be finalized and implemented, reflecting the urgency with which regulators sought to address municipal market dysfunction (Leuz and Wysocki, 2016). This regulatory environment created a unique natural experiment for examining how enhanced fiduciary obligations affect market participants' behavior and disclosure practices, as municipal advisors faced unprecedented regulatory scrutiny and potential reputational consequences for failing to meet their newly codified duties (Christensen et al., 2016).

Theoretical Framework

The Municipal Advisor Fiduciary Duty Standards create a direct connection to reputation risk theory by establishing formal standards against which market participants' conduct can be evaluated and potentially sanctioned. Reputation risk theory provides a compelling framework for understanding how regulatory changes affect voluntary disclosure decisions, as it posits that firms make strategic disclosure choices based on their assessment of potential reputational consequences (Beyer et al., 2010).

Reputation risk encompasses the potential for negative publicity, public perception, or stakeholder confidence to adversely affect a firm's business operations, financial performance, or market position. In the context of municipal advisory services, reputation serves as a crucial intangible asset that directly influences client acquisition, retention, and pricing power

(Dranove and Jin, 2010; Karpoff et al., 2008). The theory suggests that firms with greater exposure to reputation risk have stronger incentives to engage in voluntary disclosure as a mechanism to signal quality, demonstrate transparency, and preemptively address potential concerns that could damage their standing with stakeholders.

The connection between reputation risk and voluntary disclosure decisions operates through several channels, including signaling mechanisms, stakeholder management, and risk mitigation strategies. When regulatory changes increase the potential for reputational damage—as occurs when new fiduciary standards create clearer benchmarks for professional conduct—affected firms may respond by increasing voluntary disclosure to demonstrate compliance, signal quality, and maintain stakeholder confidence (Balakrishnan et al., 2014; Beyer et al., 2010; Healy and Palepu, 2001).

Hypothesis Development

The Municipal Advisor Fiduciary Duty Standards create several economic mechanisms that link enhanced regulatory oversight to voluntary disclosure decisions through the reputation risk channel. First, the establishment of formal fiduciary duties creates explicit performance benchmarks against which municipal advisors' conduct can be evaluated, increasing the likelihood that substandard performance or conflicts of interest will be identified and potentially sanctioned (Karpoff et al., 2008). This heightened scrutiny increases the potential magnitude of reputational damage from regulatory violations or client disputes, as stakeholders now have clear standards for assessing advisor conduct. Second, the registration requirements and ongoing compliance obligations create a paper trail that facilitates regulatory enforcement and increases the probability that misconduct will be detected and publicized (Christensen et al., 2016). The combination of clearer standards and enhanced monitoring creates a regulatory environment where reputation risk is both more salient and more consequential for municipal advisors' business prospects.

Prior literature on reputation risk and disclosure provides competing theoretical predictions about how firms respond to increased reputational exposure. One stream of research suggests that firms facing greater reputation risk engage in more voluntary disclosure as a preemptive strategy to signal quality and demonstrate transparency (Beyer et al., 2010; Balakrishnan et al., 2014). This perspective argues that voluntary disclosure serves as a bonding mechanism that helps firms credibly commit to high-quality service and ethical conduct, thereby reducing the likelihood of reputational damage. Conversely, another stream of literature suggests that firms may reduce disclosure when facing increased regulatory scrutiny, as additional transparency could expose them to greater liability or competitive disadvantage (Leuz and Wysocki, 2016). However, in the context of municipal advisory services, where client relationships depend heavily on trust and perceived expertise, the signaling benefits of voluntary disclosure likely outweigh the potential costs of increased transparency.

The specific characteristics of municipal advisory services strengthen the theoretical case for increased voluntary disclosure following the implementation of fiduciary duty standards. Municipal advisors operate in a relationship-intensive business where reputation serves as a primary differentiating factor and client acquisition mechanism (Butler, 2013). The long-term nature of municipal financing decisions and the public scrutiny surrounding municipal government operations create an environment where reputational damage can have persistent and far-reaching consequences for advisory firms. Furthermore, the relatively concentrated nature of the municipal advisory market means that negative publicity or regulatory sanctions can quickly become known throughout the relevant professional community, amplifying the potential impact of reputational damage (Schwarcz, 2012). These factors suggest that municipal advisors have strong economic incentives to use voluntary disclosure as a tool for reputation management and quality signaling, particularly following regulatory changes that increase the salience and potential consequences of reputation risk.

H1: Municipal advisors increase voluntary disclosure following the implementation of Municipal Advisor Fiduciary Duty Standards due to heightened reputation risk concerns.

RESEARCH DESIGN

Sample Selection and Regulatory Context

Our sample includes all firms in the Compustat universe during our analysis period, providing a comprehensive examination of the Municipal Advisor Fiduciary Duty Standards' impact on corporate voluntary disclosure practices. The Securities and Exchange Commission (SEC) implemented these fiduciary duty requirements in 2011 as part of broader financial market reforms following the Dodd-Frank Act. While the Municipal Advisor Fiduciary Duty Standards directly target municipal advisors and their relationships with municipal entities, we examine all firms in the Compustat universe to capture potential spillover effects and broader market responses to enhanced fiduciary standards in the municipal securities market (Kedia and Rajgopal, 2011; Dechow et al., 2010). Our treatment variable affects all firms in the post-regulation period, allowing us to assess whether heightened fiduciary standards in one market segment influence corporate disclosure behavior more broadly through risk-based channels.

Model Specification

We employ a pre-post research design to examine the relationship between Municipal Advisor Fiduciary Duty Standards and voluntary disclosure through the risk channel. Our regression model follows established disclosure literature and takes the form:

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

This specification allows us to isolate the effect of the regulatory change on management forecast frequency while controlling for firm-specific characteristics that prior

literature identifies as determinants of voluntary disclosure (Hribar and Yang, 2016; Billings et al., 2015). The model incorporates control variables based on established theoretical frameworks linking firm characteristics to disclosure incentives, including institutional ownership, firm size, book-to-market ratio, profitability, stock performance, earnings volatility, loss occurrence, and litigation risk.

Our research design addresses potential endogeneity concerns through the exogenous nature of the regulatory implementation. The Municipal Advisor Fiduciary Duty Standards represent an external regulatory shock that firms could not anticipate or influence, providing quasi-experimental variation in the regulatory environment (Shroff et al., 2013; Balakrishnan et al., 2014). We include a comprehensive set of control variables to mitigate concerns about omitted variable bias and ensure that our treatment effect captures the impact of the regulatory change rather than concurrent firm-level changes. The pre-post design with extensive controls helps isolate the causal effect of enhanced fiduciary standards on corporate disclosure behavior through risk-related mechanisms.

Variable Definitions

Our dependent variable, FreqMF, measures management forecast frequency and captures firms' voluntary disclosure of forward-looking information. This variable reflects managers' decisions to provide earnings guidance to the market, representing a key form of voluntary disclosure that prior research links to information asymmetry reduction and risk management (Chuk et al., 2013; Feng et al., 2009). The Treatment Effect variable is an indicator variable equal to one for the post-Municipal Advisor Fiduciary Duty Standards period from 2011 onwards, and zero otherwise, capturing the regulatory regime change affecting all firms in our sample.

Our control variables follow established disclosure literature and address key determinants of voluntary disclosure decisions. Institutional ownership (linstown) captures the monitoring and information demand effects of sophisticated investors, with higher institutional ownership typically associated with increased disclosure (Ajinkya et al., 2005). Firm size (lsize) controls for the economies of scale in information production and greater analyst following of larger firms. Book-to-market ratio (lbtm) proxies for growth opportunities and information asymmetry, while return on assets (lroa) measures profitability and managers' incentives to signal firm performance. Stock return (lsaret12) captures recent performance and potential momentum effects on disclosure decisions.

Earnings volatility (levol) measures the uncertainty in firm performance and relates directly to our risk channel, as firms with higher earnings volatility face greater information asymmetry and may adjust disclosure practices in response to regulatory changes affecting market-wide risk assessment (Kim and Verrecchia, 1994). The loss indicator (lloss) captures firms experiencing negative earnings, which face different disclosure incentives due to litigation concerns and market expectations. Class action litigation risk (lcalrisk) directly measures legal exposure and connects to our risk channel, as regulatory changes affecting fiduciary standards may alter firms' litigation risk profiles and corresponding disclosure strategies (Rogers and Stocken, 2005). These variables collectively control for the primary firm characteristics that theory and prior evidence suggest influence voluntary disclosure decisions.

Sample Construction

We construct our sample using a five-year window centered on the 2011 implementation of Municipal Advisor Fiduciary Duty Standards, spanning two years before and two years after the regulation, with the post-regulation period beginning from 2011 onwards. This event window provides sufficient pre-regulation observations to establish

baseline disclosure patterns while capturing immediate and short-term responses to the regulatory change (Shroff et al., 2013). 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 to construct our comprehensive dataset.

Our sample construction process yields 15,692 firm-year observations after applying standard data availability requirements and outlier restrictions. We require non-missing values for all regression variables and exclude financial and utility firms due to their unique regulatory environments and disclosure requirements (Balakrishnan et al., 2014). We also eliminate observations with extreme values of continuous variables by winsorizing at the 1st and 99th percentiles to reduce the influence of outliers on our results.

In our research design, all firms serve as both treatment and control observations across time periods, with the pre-2011 period serving as the control and the post-2011 period serving as the treatment. This within-firm variation approach helps control for time-invariant firm characteristics that might confound the relationship between regulatory changes and disclosure behavior (Bertrand and Mullainathan, 2003). The comprehensive nature of our sample, including all Compustat firms rather than only those directly subject to municipal advisor regulations, allows us to examine broader market-wide effects and spillover impacts of enhanced fiduciary standards on corporate disclosure practices through risk-based channels.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 15,692 firm-year observations from 4,038 unique firms over the period 2009 to 2013. This panel dataset provides comprehensive coverage of the regulatory environment surrounding municipal advisor fiduciary duty standards and their impact on firm-level outcomes.

We examine several key firm characteristics and performance measures. Institutional ownership (linstown) exhibits substantial variation across our sample, with a mean of 55.9% and standard deviation of 32.9%. The distribution shows considerable dispersion, ranging from minimal institutional presence (0.1%) to concentrated institutional ownership exceeding 100%, likely reflecting institutional holdings data aggregation effects. The interquartile range spans from 26.1% to 84.5%, indicating meaningful cross-sectional variation in institutional investor presence.

Firm size (lsize) demonstrates typical characteristics of publicly traded companies, with a mean log market value of 6.005 and standard deviation of 2.110. The distribution appears approximately normal, as evidenced by the close alignment between mean and median values (5.990). Book-to-market ratios (lbtm) average 0.745 with substantial right-skewness, consistent with the inclusion of both growth and value firms in our sample.

Profitability measures reveal interesting patterns. Return on assets (lroa) shows a slightly negative mean (-0.042) but positive median (0.021), suggesting the presence of firms with substantial losses that skew the distribution leftward. This interpretation aligns with our loss indicator (lloss), which shows that 33.8% of firm-year observations report negative earnings. Stock returns (lsaret12) exhibit similar characteristics, with mean annual returns of -1.2% but median returns of -8.3%, reflecting the challenging economic environment during our sample period, which encompasses the aftermath of the 2008 financial crisis.

Earnings volatility (levol) and litigation risk (lcalrisk) measures provide insights into firm risk profiles. Earnings volatility averages 13.6% with substantial positive skewness, while litigation risk shows a mean of 35.3%, indicating considerable variation in firms' legal exposure across our sample.

Our treatment variables confirm the research design's validity. The post_law indicator shows that 57.1% of observations occur in the post-regulation period, while all firms in our sample receive treatment (treated = 1.000), consistent with our focus on firms affected by municipal advisor regulations. The management forecast frequency (freqMF) variable exhibits significant variation, with many firms providing no forecasts (median = 0) while others issue multiple forecasts annually, enabling robust analysis of disclosure behavior changes following regulatory implementation.

RESULTS

Regression Analysis

We examine the association between the implementation of Municipal Advisor Fiduciary Duty Standards in 2011 and voluntary disclosure behavior using three regression specifications with varying levels of control sophistication. Our findings reveal a striking pattern that contradicts our theoretical predictions. Specification (1), which presents a simple treatment effect without controls, shows a positive and highly significant coefficient of 0.0641 ($t = 7.17$, $p < 0.001$), suggesting that municipal advisors increased voluntary disclosure following the regulatory change. However, this result proves to be spurious when we account for firm characteristics and economic fundamentals. Specifications (2) and (3), which include comprehensive control variables, both demonstrate negative treatment effects of -0.0219 ($t = -2.00$, $p = 0.046$) and -0.0186 ($t = -2.03$, $p = 0.043$), respectively. The dramatic reversal from positive to negative treatment effects across specifications indicates that omitted variable bias substantially distorts the naive estimation, highlighting the critical importance of controlling for firm-specific characteristics when examining voluntary disclosure decisions.

The statistical significance and economic magnitude of our findings provide robust evidence of a negative association between fiduciary duty standards and voluntary disclosure.

Both controlled specifications yield statistically significant results at conventional levels ($p < 0.05$), with t-statistics exceeding the critical threshold of 2.0 in absolute value. The economic magnitude suggests that the implementation of fiduciary duty standards is associated with approximately a 1.9 to 2.2 percentage point decrease in voluntary disclosure, representing a meaningful reduction given typical disclosure variation in our sample. The substantial improvement in explanatory power across specifications—from an R-squared of 0.0013 in the uncontrolled model to 0.2381 with firm characteristics and 0.9027 with firm fixed effects—demonstrates that our control variables capture important determinants of voluntary disclosure behavior. The firm fixed effects specification (3) provides the most credible identification by controlling for time-invariant unobserved heterogeneity across municipal advisors, and the consistency of the negative treatment effect across both controlled specifications strengthens our confidence in this finding.

Our control variable results align closely with established voluntary disclosure literature and provide important insights into the determinants of disclosure behavior among municipal advisors. We find that institutional ownership (linstown) exhibits a strong positive association with voluntary disclosure across all specifications, consistent with prior research demonstrating that institutional investors demand greater transparency (Bushee and Noe, 2000). Firm size (lsize) shows a consistently positive and highly significant relationship with disclosure, supporting the economies of scale argument for voluntary disclosure (Lang and Lundholm, 1993). The negative coefficient on book-to-market ratio (lbtm) in specification (2) suggests that growth firms engage in more voluntary disclosure, consistent with signaling theory predictions. Notably, firms reporting losses (lloss) consistently exhibit lower voluntary disclosure, which aligns with managers' incentives to withhold bad news (Kothari et al., 2009). The negative association with stock return volatility (levol) and litigation risk (lcalrisk) in earlier specifications supports the proprietary cost hypothesis, though these effects attenuate when firm fixed effects are included. Contrary to our hypothesis (H1), which predicted that

municipal advisors would increase voluntary disclosure following the implementation of fiduciary duty standards due to heightened reputation risk concerns, our results demonstrate a significant negative association. This finding suggests that the regulatory change led to reduced rather than increased transparency, potentially indicating that municipal advisors responded to enhanced regulatory scrutiny by becoming more conservative in their disclosure practices, possibly to avoid exposing themselves to additional regulatory or legal liability.

CONCLUSION

We examine whether the implementation of Municipal Advisor Fiduciary Duty Standards in 2011 influenced voluntary disclosure practices through the risk channel. Our research question centers on understanding how enhanced fiduciary obligations for municipal advisors affected corporate disclosure behavior, particularly focusing on how risk considerations mediate this relationship. The 2011 regulation established stringent fiduciary duty requirements for municipal advisors, fundamentally altering the advisory landscape and creating enhanced protection mechanisms for municipal entities engaging in securities transactions.

Our empirical analysis reveals nuanced effects that depend critically on model specification and the inclusion of control variables. In our baseline specification without controls, we find a positive and statistically significant treatment effect of 0.0641 (t-statistic = 7.17, $p < 0.001$), suggesting that the implementation of fiduciary duty standards initially increased voluntary disclosure. However, when we incorporate comprehensive control variables in our second specification, the treatment effect becomes negative and significant at -0.0219 (t-statistic = 2.00, $p = 0.046$). This reversal indicates that the apparent positive effect in the baseline model was confounded by omitted variables. Our most comprehensive specification, which includes firm fixed effects and achieves an R-squared of 0.9027, confirms a negative treatment effect of -0.0186 (t-statistic = 2.03, $p = 0.043$). The consistency of the

negative coefficient across our controlled specifications provides robust evidence that the Municipal Advisor Fiduciary Duty Standards reduced voluntary disclosure through the risk channel. The economic magnitude, while statistically significant, suggests a moderate effect size that reflects the complex interplay between regulatory changes and corporate disclosure incentives.

The control variables provide additional insights into the risk-disclosure relationship. We find that institutional ownership (linstown) and firm size (lsize) are positively associated with disclosure, consistent with prior literature suggesting that larger firms and those with greater institutional monitoring face higher disclosure expectations (Bushee and Noe, 2000; Ajinkya et al., 2005). Conversely, firms reporting losses (lloss) and those with higher calculated risk measures (lcalrisk) exhibit significantly lower disclosure levels, supporting the notion that risk considerations fundamentally shape disclosure decisions. The negative coefficient on stock return volatility (lsaret12) further reinforces the risk-disclosure nexus, suggesting that firms facing greater market uncertainty may strategically reduce voluntary disclosure to avoid potential litigation or competitive disadvantages.

Our findings carry important implications for regulators, managers, and investors. For regulators, our results suggest that well-intentioned fiduciary duty requirements may have unintended consequences on information transparency. The Municipal Advisor Fiduciary Duty Standards, while designed to protect municipal entities, appear to have created incentives for reduced voluntary disclosure, potentially through increased liability concerns or compliance costs. Regulators should consider these disclosure effects when designing future municipal finance regulations and may need to implement complementary measures to maintain information transparency. For corporate managers, our findings highlight the importance of understanding how regulatory changes in related markets can affect optimal disclosure strategies. The risk channel mechanism suggests that managers increasingly view voluntary

disclosure through a risk management lens, weighing potential benefits against heightened liability exposure in the post-regulation environment.

Investors should recognize that regulatory changes in municipal finance markets can have spillover effects on corporate disclosure practices, potentially affecting information availability for investment decisions. The negative relationship between risk measures and disclosure suggests that investors may face greater information asymmetries precisely when uncertainty is highest, potentially affecting market efficiency and pricing accuracy. Our findings contribute to the broader literature on regulatory spillovers and disclosure determinants, extending work by Leuz and Wysocki (2016) and Shroff et al. (2013) by demonstrating how municipal finance regulations can influence corporate disclosure behavior through risk-based mechanisms.

Our study faces several limitations that suggest promising avenues for future research. First, while we establish a statistical association between the Municipal Advisor Fiduciary Duty Standards and disclosure changes, identifying the precise causal mechanisms requires additional investigation. Future research could employ more granular identification strategies, such as exploiting cross-sectional variation in firms' exposure to municipal finance markets or their reliance on municipal advisory services. Second, our focus on the risk channel, while theoretically motivated, represents one of potentially several mechanisms through which the regulation could affect disclosure. Future studies could explore alternative channels, such as cost-based mechanisms, competitive considerations, or changes in investor demand for information.

The risk channel itself warrants deeper investigation, particularly regarding how different dimensions of risk—operational, financial, litigation, or reputational—differentially influence disclosure responses to regulatory changes. Researchers could examine whether the effects we document vary across industries, firm characteristics, or information environments.

Additionally, future work could investigate the welfare implications of reduced voluntary disclosure following fiduciary duty implementations, examining whether the enhanced municipal entity protection justifies potential reductions in market transparency. Finally, our findings suggest that regulatory impact assessments should consider cross-market spillover effects, opening opportunities for research examining how regulations in one domain affect behavior and outcomes in related markets.

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Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	15,692	0.5913	0.8884	0.0000	0.0000	1.6094
Treatment Effect	15,692	0.5712	0.4949	0.0000	1.0000	1.0000
Institutional ownership	15,692	0.5595	0.3285	0.2614	0.6210	0.8450
Firm size	15,692	6.0051	2.1100	4.4199	5.9902	7.4812
Book-to-market	15,692	0.7451	0.7210	0.3217	0.5901	0.9762
ROA	15,692	-0.0420	0.2522	-0.0329	0.0211	0.0659
Stock return	15,692	-0.0118	0.4912	-0.2998	-0.0832	0.1606
Earnings volatility	15,692	0.1362	0.2658	0.0235	0.0553	0.1398
Loss	15,692	0.3376	0.4729	0.0000	0.0000	1.0000
Class action litigation risk	15,692	0.3533	0.2930	0.1131	0.2561	0.5437
Time Trend	15,692	1.9108	1.4169	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
Municipal Advisor Fiduciary Duty Standards Reputation Risk

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
Treatment Effect	1.00	0.04	-0.04	0.12	-0.11	0.10	0.03	-0.04	-0.14	0.07
FreqMF	0.04	1.00	0.41	0.44	-0.17	0.22	-0.01	-0.16	-0.27	-0.01
Institutional ownership	-0.04	0.41	1.00	0.61	-0.20	0.29	-0.06	-0.22	-0.26	0.06
Firm size	0.12	0.44	0.61	1.00	-0.38	0.36	0.04	-0.25	-0.41	0.15
Book-to-market	-0.11	-0.17	-0.20	-0.38	1.00	0.04	-0.20	-0.12	0.13	-0.10
ROA	0.10	0.22	0.29	0.36	0.04	1.00	0.12	-0.52	-0.59	-0.07
Stock return	0.03	-0.01	-0.06	0.04	-0.20	0.12	1.00	0.01	-0.14	0.01
Earnings volatility	-0.04	-0.16	-0.22	-0.25	-0.12	-0.52	0.01	1.00	0.32	0.11
Loss	-0.14	-0.27	-0.26	-0.41	0.13	-0.59	-0.14	0.32	1.00	0.12
Class action litigation risk	0.07	-0.01	0.06	0.15	-0.10	-0.07	0.01	0.11	0.12	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 Municipal Advisor Fiduciary Duty Standards on Management Forecast Frequency

	(1)	(2)	(3)
Treatment Effect	0.0641*** (7.17)	-0.0219** (2.00)	-0.0186** (2.03)
Institutional ownership		0.5646*** (12.29)	0.0602** (2.08)
Firm size		0.1162*** (12.51)	0.0484*** (4.84)
Book-to-market		-0.0306** (2.46)	-0.0014 (0.14)
ROA		0.0250 (0.76)	0.0462** (2.12)
Stock return		-0.0399*** (3.65)	-0.0101 (1.34)
Earnings volatility		-0.0293 (0.88)	-0.0104 (0.23)
Loss		-0.1577*** (7.86)	-0.0527*** (4.51)
Class action litigation risk		-0.1664*** (5.82)	-0.0134 (1.08)
Time Trend		0.0088* (1.91)	0.0165*** (4.30)
Firm fixed effects	No	No	Yes
N	15,692	15,692	15,692
R ²	0.0013	0.2381	0.9027

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