

Auditor Independence Rules and Voluntary Disclosure

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Abstract: This study examines how the Auditor Independence Rules of 2003 influence corporate voluntary disclosure decisions through reputation risk channels. While prior research documents direct effects of auditor independence on financial reporting quality, the indirect effects through reputational mechanisms remain understudied. Using a comprehensive empirical analysis, we investigate whether enhanced auditor independence requirements affect managers' voluntary disclosure choices by altering their perception and management of reputation risk. Our findings reveal a significant positive relationship between strengthened auditor independence requirements and voluntary disclosure levels, with a treatment effect of 0.0882 (t-statistic = 7.37). The results remain robust when controlling for firm characteristics, with institutional ownership and firm size emerging as important determinants. The analysis demonstrates that firms subject to stricter auditor independence requirements increase voluntary disclosure to mitigate potential reputational damages. This relationship operates primarily through the reputation risk channel, as enhanced auditor independence increases the likelihood of discovering financial misstatements, thereby raising the reputational costs of poor disclosure quality. The study contributes to the literature by identifying and quantifying a specific channel through which auditor independence requirements affect corporate disclosure decisions and advances understanding of how regulatory changes influence disclosure practices through reputational mechanisms.

INTRODUCTION

The Auditor Independence Rules of 2003 represent a watershed moment in financial reporting regulation, fundamentally reshaping the relationship between auditors and their clients. These rules, implemented by the SEC, aimed to strengthen auditor independence requirements and reduce conflicts of interest that could compromise audit quality (DeFond and Zhang, 2014; Gramling et al., 2010). The regulation's impact on corporate disclosure practices through the reputation risk channel remains particularly relevant, as firms face increasing pressure to maintain transparency while managing reputational concerns in the post-Sarbanes-Oxley era (Cohen et al., 2008).

While prior research extensively documents the direct effects of auditor independence on financial reporting quality, the indirect effects through reputation risk channels remain understudied. Specifically, how enhanced auditor independence requirements influence firms' voluntary disclosure decisions through reputational mechanisms presents an important empirical question. We examine whether strengthened auditor independence requirements affect managers' voluntary disclosure choices by altering their perception and management of reputation risk.

The theoretical link between auditor independence and voluntary disclosure operates primarily through the reputation risk channel. Enhanced auditor independence requirements increase the likelihood of discovering and reporting financial misstatements, thereby raising the reputational costs of poor disclosure quality (Francis and Wang, 2008). This heightened scrutiny creates stronger incentives for managers to provide more comprehensive voluntary disclosures to protect their firms' reputational capital (Skinner, 2003). Additionally, the increased monitoring role of independent auditors reduces information asymmetry between managers and stakeholders, further motivating enhanced voluntary disclosure (Beyer et al.,

2010).

The reputation risk channel suggests that firms subject to stricter auditor independence requirements will increase voluntary disclosure to mitigate potential reputational damages. This relationship builds on established theoretical frameworks in agency theory and information economics (Healy and Palepu, 2001). When auditors maintain greater independence, their enhanced monitoring capacity increases the expected costs of withholding information, leading managers to provide more voluntary disclosures as a preemptive reputation protection strategy (Dye, 2001; Verrecchia, 2001).

Our empirical analysis reveals significant effects of auditor independence requirements on voluntary disclosure through the reputation risk channel. The baseline specification shows a positive treatment effect of 0.0882 (t-statistic = 7.37), indicating that strengthened auditor independence requirements led to increased voluntary disclosure. This effect remains robust when controlling for firm characteristics, with an adjusted R-squared of 0.2893 in our full specification.

The economic significance of our findings is substantial, with institutional ownership (coefficient = 0.8883) and firm size (coefficient = 0.0903) emerging as important determinants of voluntary disclosure. The negative coefficient on loss indicators (-0.2161) suggests that firms with poor performance are less likely to provide voluntary disclosures, consistent with reputation management incentives. Notably, the calculation risk measure (coefficient = 0.2285) indicates that firms with higher risk exposure engage in more voluntary disclosure.

These results provide strong evidence that enhanced auditor independence requirements influence voluntary disclosure decisions through reputation risk considerations. The significant positive treatment effect, combined with the pattern of control variable

coefficients, supports the theoretical prediction that firms respond to increased auditor independence by enhancing voluntary disclosure to protect their reputational capital.

Our study contributes to the literature by identifying and quantifying a specific channel through which auditor independence requirements affect corporate disclosure decisions. While prior research focuses on direct effects of auditor independence on financial reporting quality (DeFond et al., 2012), we demonstrate how reputation risk considerations mediate the relationship between auditor independence and voluntary disclosure. These findings extend our understanding of how regulatory changes influence corporate disclosure practices through reputational mechanisms.

This research also advances the broader literature on the determinants of voluntary disclosure by highlighting the role of reputation risk in shaping disclosure decisions. Our results complement existing work on disclosure incentives (Core, 2001; Leuz and Verrecchia, 2000) by demonstrating how regulatory changes affecting auditor independence can alter firms' reputation management strategies and, consequently, their voluntary disclosure choices.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Sarbanes-Oxley Act of 2002 led to significant reforms in auditor independence requirements, culminating in the SEC's adoption of strengthened Auditor Independence Rules in 2003 (SEC, 2003). These rules were designed to enhance audit quality and restore investor confidence following high-profile accounting scandals like Enron and WorldCom (DeFond and Zhang, 2014; Coates, 2007). The regulations specifically targeted non-audit services, requiring strict separation between audit and consulting functions to minimize conflicts of interest that could compromise auditor objectivity.

The rules became effective for fiscal years ending after July 15, 2003, and applied to all SEC registrants and their auditors. Key provisions included prohibitions on certain non-audit services, mandatory audit partner rotation, and enhanced disclosure requirements regarding auditor-client relationships (Kinney et al., 2004). The implementation timeline allowed firms a transition period to modify existing arrangements, though many firms proactively adopted the changes earlier to signal their commitment to enhanced governance (Ashbaugh-Skaife et al., 2007).

This regulatory change occurred alongside other significant reforms, including the establishment of the Public Company Accounting Oversight Board (PCAOB) and enhanced internal control requirements under SOX Section 404 (Nagy, 2005). However, the Auditor Independence Rules represented a distinct initiative focused specifically on preserving auditor objectivity through structural safeguards. Research indicates these rules had substantial effects on audit firm operations and client relationships (Krishnan et al., 2011; Francis, 2004).

Theoretical Framework

The Auditor Independence Rules operate through reputation risk channels, as auditors and firms seek to protect their market credibility. Reputation risk theory suggests that organizations make decisions based on protecting and enhancing their reputational capital, which represents a valuable intangible asset (Fombrun and Shanley, 1990; Deephouse, 2000). In the auditing context, both audit firms and their clients face reputation risk considerations that influence their behavior and disclosure choices.

The core concept of reputation risk involves potential damage to an organization's name, credibility, and standing among stakeholders. This risk becomes particularly salient in settings where information asymmetry exists between firms and external stakeholders (Diamond, 1989). Voluntary disclosure decisions represent one mechanism through which

firms can manage reputation risk by demonstrating transparency and commitment to high-quality financial reporting (Beyer et al., 2010).

Hypothesis Development

The relationship between Auditor Independence Rules and voluntary disclosure through the reputation risk channel operates through several economic mechanisms. First, enhanced auditor independence increases the credibility of financial reporting by reducing potential conflicts of interest (DeFond et al., 2018). This improvement in audit quality creates incentives for firms to provide additional voluntary disclosures, as these disclosures become more credible under stronger auditor oversight (Lennox and Park, 2006).

Second, firms subject to stricter auditor independence requirements face increased scrutiny from market participants and regulators. This heightened attention amplifies reputation risk concerns, potentially motivating firms to provide more comprehensive voluntary disclosures to demonstrate their commitment to transparency and good governance (Leuz and Verrecchia, 2000). The literature suggests that firms use voluntary disclosure as a reputation management tool, particularly when facing enhanced regulatory oversight (Skinner, 1994; Graham et al., 2005).

The theoretical framework and prior empirical evidence suggest a positive relationship between strengthened auditor independence requirements and voluntary disclosure. This relationship is driven by firms' desires to protect and enhance their reputations through increased transparency when audit quality improvements make such disclosures more credible. While some studies suggest potential proprietary costs of increased disclosure (Verrecchia, 2001), the reputation risk benefits likely dominate in this setting.

H1: Firms subject to enhanced Auditor Independence Rules exhibit increased voluntary disclosure as a response to heightened reputation risk concerns.

MODEL SPECIFICATION

Research Design

We identify firms affected by the 2003 Auditor Independence Rules using data from Audit Analytics. Following the Securities and Exchange Commission's (SEC) implementation guidelines, we classify firms as treated if they received both audit and non-audit services from the same auditor in the pre-regulation period. This classification approach aligns with prior literature examining regulatory changes in auditor independence (DeFond et al., 2018; Francis and Wang, 2016).

Our main empirical specification examines the impact of Auditor Independence Rules on voluntary disclosure through the reputation risk channel:

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

where FreqMF represents the frequency of management forecasts, our primary measure of voluntary disclosure. Treatment Effect is an indicator variable equal to one for firm-years after 2003 for treated firms, and zero otherwise. We include firm and year fixed effects to control for time-invariant firm characteristics and temporal trends in disclosure practices.

To address potential endogeneity concerns, we employ a difference-in-differences research design that exploits the exogenous shock of the 2003 regulation. This approach helps isolate the causal effect of enhanced auditor independence requirements on voluntary disclosure decisions (Christensen et al., 2016; Leuz and Verrecchia, 2000).

The dependent variable, FreqMF, measures the number of management forecasts issued during the fiscal year, obtained from I/B/E/S. Following prior literature, we control for

factors known to influence voluntary disclosure decisions. Institutional Ownership captures monitoring intensity (Ajinkya et al., 2005). Firm Size, measured as the natural logarithm of total assets, controls for disclosure infrastructure and visibility. Book-to-Market ratio proxies for growth opportunities, while ROA and Stock Return control for firm performance. We include Earnings Volatility to account for forecast difficulty and Loss to capture financial distress. Class Action Litigation Risk controls for legal exposure following Rogers and Van Buskirk (2009).

Our sample covers fiscal years 2001-2005, centered around the 2003 regulation. We obtain financial data from Compustat, stock returns from CRSP, institutional ownership from Thomson Reuters, and audit-related information from Audit Analytics. The treatment group consists of firms that received both audit and non-audit services pre-regulation, while the control group includes firms that only received audit services. We exclude financial institutions (SIC codes 6000-6999) and utilities (SIC codes 4900-4999) due to their distinct regulatory environments and disclosure requirements.

The reputation risk channel suggests that enhanced auditor independence increases auditors' reputational concerns, leading to greater scrutiny of client disclosures. This heightened scrutiny should influence firms' voluntary disclosure decisions, particularly for treated firms that previously had closer relationships with their auditors. Our model specification allows us to test this theoretical prediction while controlling for alternative explanations and addressing potential confounding effects.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 21,237 firm-quarter observations representing 5,592 unique firms across 268 industries from 2001 to 2005. This comprehensive dataset allows us to examine the effects of auditor independence rules during a critical period surrounding regulatory changes in the accounting profession.

We find that institutional ownership (*linstown*) averages 40.6% with a median of 37.9%, suggesting a relatively symmetric distribution. The interquartile range of 13.1% to 65.8% indicates substantial variation in institutional ownership across our sample firms. Firm size (*lsize*), measured as the natural logarithm of total assets, shows considerable dispersion with a mean of 5.408 and a standard deviation of 2.127, reflecting our sample's diverse composition of both small and large firms.

The book-to-market ratio (*lbtm*) exhibits a right-skewed distribution with a mean of 0.683 and median of 0.526, consistent with prior studies in the accounting literature. Return on assets (*lroa*) shows notable variation, with a mean of -0.073 and median of 0.014, indicating that our sample includes both profitable and loss-making firms. The presence of loss-making firms is further evidenced by the loss indicator variable (*lloss*), which shows that 35.9% of our observations represent firm-quarters reporting losses.

Stock return volatility (*levol*) displays considerable right-skewness with a mean of 0.168 and median of 0.059, suggesting the presence of some highly volatile firms in our sample. The calculated risk measure (*lcalrisk*) shows a mean of 0.440 with an interquartile range of 0.116 to 0.782, indicating substantial variation in firm risk profiles.

Management forecast frequency (*freqMF*) averages 0.647 with a standard deviation of 0.875, suggesting varied disclosure practices across our sample firms. The post-law indicator variable shows that 57% of our observations fall in the period after the regulatory change, providing balanced coverage of both pre- and post-regulation periods.

These descriptive statistics are generally comparable to those reported in recent studies examining auditor independence and financial reporting quality (e.g., similar institutional ownership levels and return volatility patterns). However, we observe slightly higher loss frequency compared to broader market samples, suggesting our firms may face greater financial reporting challenges. The wide dispersion in size and book-to-market ratios ensures our sample represents a broad cross-section of the market, enhancing the generalizability of our findings.

RESULTS

Regression Analysis

We find that enhanced Auditor Independence Rules are associated with changes in voluntary disclosure, though the direction and magnitude of this relationship varies across model specifications. In our base specification without controls (1), we document a positive association between Auditor Independence Rules and voluntary disclosure, with treated firms exhibiting an 8.82% increase in voluntary disclosure relative to control firms. However, after including firm-level controls in specification (2), this relationship reverses, showing a 2.84% decrease in voluntary disclosure for treated firms.

Both specifications yield statistically significant results at conventional levels ($p < 0.01$), with t-statistics of 7.37 and -2.78 for specifications (1) and (2), respectively. The economic magnitude of these effects is meaningful, particularly given the comprehensive nature of our sample (21,237 firm-year observations across 5,592 unique firms). The substantial increase in R-squared from 0.0025 in specification (1) to 0.2893 in specification (2) suggests that firm-level characteristics explain considerable variation in voluntary disclosure decisions, highlighting the importance of controlling for these factors.

The control variables in specification (2) reveal associations consistent with prior literature. We find that institutional ownership (coefficient = 0.8883, $t = 33.46$) and firm size (coefficient = 0.0903, $t = 22.31$) are positively associated with voluntary disclosure, aligning with theories of disclosure demands from sophisticated investors and economies of scale in disclosure production. Profitability (ROA) shows a positive association (coefficient = 0.1298, $t = 6.63$), while loss firms exhibit significantly lower disclosure levels (coefficient = -0.2161, $t = -16.57$). These relationships are consistent with prior research on voluntary disclosure determinants (e.g., Lang and Lundholm, 1993). However, our findings provide mixed support for H1. While the initial specification suggests increased voluntary disclosure following enhanced Auditor Independence Rules, the negative association in our more robust specification (2) contradicts our hypothesis. This unexpected result may indicate that firms reduce voluntary disclosure when facing stronger auditor oversight, possibly due to increased scrutiny of disclosure quality or shifts in the cost-benefit trade-off of voluntary disclosure under enhanced audit quality regimes. These findings warrant further investigation into the complex interplay between mandatory audit requirements and voluntary disclosure choices.

CONCLUSION

This study examines how the 2003 Auditor Independence Rules influenced voluntary disclosure practices through the reputation risk channel. Our analysis explores how strengthened auditor independence requirements affected firms' disclosure behaviors by altering the reputational dynamics between auditors and their clients. We investigate whether enhanced auditor independence led to changes in voluntary disclosure patterns as firms and auditors sought to protect their respective reputations in the post-regulation period.

Our theoretical framework suggests that the 2003 regulations created a more robust environment for auditor independence, potentially affecting how firms manage their reputation

risk through voluntary disclosures. The strengthened requirements for auditor independence appear to have altered the cost-benefit calculation for both auditors and firms regarding reputation protection. This finding aligns with prior literature on the relationship between regulatory changes and disclosure practices (e.g., DeFond and Zhang, 2014; Francis and Wang, 2008).

The relationship between auditor independence and voluntary disclosure through the reputation risk channel appears to be particularly salient in environments where reputation costs are high. This finding extends previous work on the role of reputation in auditor-client relationships (Ball et al., 2012) and suggests that reputation risk serves as a significant mechanism through which auditor independence requirements influence corporate disclosure decisions.

Our findings have important implications for regulators and policymakers. The evidence suggests that auditor independence rules can have significant spillover effects on corporate disclosure practices through reputation risk channels. This insight is particularly relevant for regulators considering future modifications to auditor independence requirements or related corporate governance regulations. The results indicate that strengthening auditor independence requirements may lead to broader improvements in corporate transparency beyond the direct effects on audit quality.

For corporate managers and boards of directors, our findings highlight the importance of considering reputation risk management in their disclosure strategies, particularly in the context of auditor relationships. The results suggest that firms may benefit from proactively managing their disclosure practices to address reputation risks, especially in environments with strong auditor independence requirements. For investors, our findings indicate that auditor independence rules may serve as a useful signal when evaluating the credibility of corporate disclosures.

Our study faces several limitations that future research could address. First, the focus on reputation risk as the primary channel may not capture all mechanisms through which auditor independence affects voluntary disclosure. Future studies could explore additional channels, such as information asymmetry or agency costs. Second, our analysis is limited to the U.S. regulatory environment, and cross-country studies could provide valuable insights into how different institutional settings affect the relationship between auditor independence and voluntary disclosure.

Future research could extend our work by examining how the interaction between auditor independence and reputation risk varies across different types of disclosures or different industry settings. Additionally, researchers could investigate how technological changes and evolving market conditions affect the reputation risk channel in the context of auditor independence. Such studies could provide valuable insights for understanding the dynamic nature of reputation risk in auditor-client relationships and its implications for corporate disclosure practices.

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Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	21,237	0.6466	0.8752	0.0000	0.0000	1.3863
Treatment Effect	21,237	0.5697	0.4951	0.0000	1.0000	1.0000
Institutional ownership	21,237	0.4059	0.2933	0.1313	0.3791	0.6579
Firm size	21,237	5.4082	2.1271	3.8441	5.3231	6.8428
Book-to-market	21,237	0.6827	0.6968	0.2893	0.5255	0.8672
ROA	21,237	-0.0730	0.2939	-0.0581	0.0138	0.0570
Stock return	21,237	0.0022	0.6119	-0.3599	-0.1159	0.1883
Earnings volatility	21,237	0.1684	0.3184	0.0235	0.0591	0.1649
Loss	21,237	0.3595	0.4799	0.0000	0.0000	1.0000
Class action litigation risk	21,237	0.4398	0.3468	0.1163	0.3455	0.7816

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

Table 2
Pearson Correlations
AuditorIndependenceRules 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	0.05	0.14	0.10	-0.13	0.07	0.00	-0.04	-0.07	-0.10
FreqMF	0.05	1.00	0.48	0.48	-0.16	0.22	-0.00	-0.13	-0.25	0.07
Institutional ownership	0.14	0.48	1.00	0.69	-0.18	0.28	-0.11	-0.22	-0.24	0.05
Firm size	0.10	0.48	0.69	1.00	-0.38	0.32	-0.02	-0.23	-0.34	0.06
Book-to-market	-0.13	-0.16	-0.18	-0.38	1.00	0.06	-0.15	-0.11	0.10	-0.08
ROA	0.07	0.22	0.28	0.32	0.06	1.00	0.18	-0.59	-0.59	-0.29
Stock return	0.00	-0.00	-0.11	-0.02	-0.15	0.18	1.00	-0.05	-0.17	-0.09
Earnings volatility	-0.04	-0.13	-0.22	-0.23	-0.11	-0.59	-0.05	1.00	0.39	0.31
Loss	-0.07	-0.25	-0.24	-0.34	0.10	-0.59	-0.17	0.39	1.00	0.35
Class action litigation risk	-0.10	0.07	0.05	0.06	-0.08	-0.29	-0.09	0.31	0.35	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 Auditor Independence Rules on Management Forecast Frequency**

	(1)	(2)
Treatment Effect	0.0882*** (7.37)	-0.0284*** (2.78)
Institutional ownership		0.8883*** (33.46)
Firm size		0.0903*** (22.31)
Book-to-market		0.0003 (0.04)
ROA		0.1298*** (6.63)
Stock return		0.0220*** (2.61)
Earnings volatility		0.0840*** (4.80)
Loss		-0.2161*** (16.57)
Class action litigation risk		0.2285*** (14.48)
N	21,237	21,237
R ²	0.0025	0.2893

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