Auditor Independence Rules and Voluntary Disclosure

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Abstract: This study examines how the 2003 SEC Auditor Independence Rules influenced corporate voluntary disclosure decisions through the litigation risk channel. While prior research documents the impact of enhanced auditor independence on financial reporting quality, its effect on voluntary disclosure remains theoretically ambiguous. Using a differences-in-differences design, we analyze how stricter independence requirements alter firms' disclosure behavior through changes in litigation risk exposure. Results reveal a complex relationship between auditor independence and voluntary disclosure. Initial analysis shows a positive treatment effect of 0.0882, indicating increased disclosure following the regulation. However, after controlling for firm characteristics, we find a negative coefficient of -0.0284, suggesting the relationship is moderated by firm-specific factors. Institutional ownership and firm size emerge as significant determinants, with coefficients of 0.8883 and 0.0903, respectively. The strong relationship between calendar risk and disclosure (coefficient = 0.2285) supports the litigation risk channel as a key mechanism. This study contributes to the literature by documenting how regulatory interventions in the audit profession influence corporate disclosure practices through changes in litigation risk exposure, extending our understanding beyond direct effects on financial reporting quality. The findings have important implications for regulators and practitioners regarding the spillover effects of auditor oversight on voluntary disclosure practices.

INTRODUCTION

The Sarbanes-Oxley Act of 2002 and subsequent SEC Auditor Independence Rules of 2003 represent watershed moments in the regulation of the accounting profession, fundamentally reshaping the relationship between auditors and their clients. These regulations aimed to enhance audit quality and reduce conflicts of interest by establishing stricter independence requirements, including restrictions on non-audit services and mandatory audit partner rotation (DeFond and Zhang, 2014; Lennox, 2016). The rules' impact on financial reporting quality and market outcomes has been extensively studied, yet their effect on voluntary disclosure through the litigation risk channel remains understudied (Francis et al., 2017).

A critical aspect of auditor independence rules is their potential to alter firms' disclosure behavior through changes in litigation risk exposure. While prior research documents that enhanced auditor independence improves financial reporting quality (Krishnan et al., 2011), the relationship between stricter independence requirements and voluntary disclosure decisions remains theoretically ambiguous. We examine how the 2003 SEC rules affected voluntary disclosure through changes in litigation risk, addressing the fundamental question: How do enhanced auditor independence requirements influence firms' voluntary disclosure decisions through the litigation risk channel?

The theoretical link between auditor independence and voluntary disclosure operates primarily through the litigation risk channel. Enhanced auditor independence requirements increase auditors' professional skepticism and monitoring intensity, potentially exposing them to greater litigation risk (Ball et al., 2012). This heightened scrutiny may lead auditors to demand more conservative disclosure practices from their clients, affecting both mandatory and voluntary disclosures (Dye, 2017). The litigation risk channel suggests that firms may respond to increased auditor scrutiny by either increasing disclosure to mitigate litigation risk or reducing disclosure to limit potential legal exposure.

Prior literature establishes that litigation risk significantly influences corporate disclosure decisions (Skinner, 1994; Field et al., 2005). Enhanced auditor independence requirements may amplify this effect by increasing the perceived probability of detecting misstatements or omissions. This mechanism suggests that firms facing higher litigation risk may increase voluntary disclosure to protect themselves against future lawsuits, particularly when auditor oversight is more stringent (Cohen et al., 2008).

Building on established theoretical frameworks of disclosure choice under litigation risk (Verrecchia, 2001), we predict that firms will increase voluntary disclosure in response to enhanced auditor independence requirements. This prediction stems from the notion that stronger auditor independence increases the credibility of voluntary disclosures while simultaneously raising the costs of non-disclosure when negative information exists.

Our empirical analysis reveals significant changes in voluntary disclosure following the implementation of the 2003 SEC rules. The baseline specification without controls shows a positive treatment effect of 0.0882 (t-statistic = 7.37), indicating an immediate increase in voluntary disclosure following the regulation. However, after controlling for firm characteristics, we find a more nuanced effect with a treatment coefficient of -0.0284 (t-statistic = 2.78), suggesting that the relationship between auditor independence and voluntary disclosure is moderated by firm-specific factors.

The analysis demonstrates strong economic significance, with institutional ownership (coefficient = 0.8883) and firm size (coefficient = 0.0903) emerging as particularly important determinants of voluntary disclosure. The high statistical significance of these controls (t-statistics of 33.46 and 22.31, respectively) suggests that firm characteristics substantially influence the relationship between auditor independence requirements and voluntary disclosure decisions.

The results reveal a complex interaction between auditor independence requirements and litigation risk. While the initial positive effect suggests that firms responded to increased auditor scrutiny by enhancing voluntary disclosure, the negative coefficient in the controlled specification indicates that firms with stronger governance mechanisms may have already maintained optimal disclosure levels. The significant relationship between calendar risk (coefficient = 0.2285, t-statistic = 14.48) and disclosure supports the litigation risk channel as a key mechanism.

This study contributes to the literature by providing novel evidence on how auditor independence requirements affect voluntary disclosure through the litigation risk channel. While prior research focuses primarily on the direct effects of auditor independence on financial reporting quality (DeFond and Zhang, 2014), we extend this literature by examining its indirect effects on voluntary disclosure decisions. Our findings advance understanding of how regulatory interventions in the audit profession influence corporate disclosure practices through changes in litigation risk exposure.

Our analysis also contributes to the broader literature on the determinants of voluntary disclosure by identifying auditor independence requirements as a significant institutional factor affecting disclosure choices. These findings have important implications for regulators and practitioners, suggesting that changes in auditor oversight can have substantial spillover effects on firms' voluntary disclosure practices through the litigation risk channel.

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, enhanced disclosure requirements for audit and non-audit fees, and mandatory audit partner rotation every five years (Kinney et al., 2004; Francis, 2004). The implementation timeline allowed firms a transition period to restructure their relationships with audit firms, particularly regarding ongoing consulting engagements and partner assignments.

During this period, other significant regulatory changes were also enacted, including enhanced internal control requirements under SOX Section 404 and new CEO/CFO certification requirements. However, the Auditor Independence Rules represented a distinct reform focused specifically on the auditor-client relationship (Nagy, 2005; Krishnan et al., 2011). These concurrent changes necessitate careful research design to isolate the effects of auditor independence requirements from other regulatory reforms.

Theoretical Framework

The Auditor Independence Rules operate through multiple channels to influence firm behavior, with litigation risk serving as a primary theoretical mechanism. Enhanced auditor independence requirements increase auditors' exposure to litigation by establishing clearer standards for professional conduct and reducing potential conflicts that could compromise audit quality (Skinner, 1994; Healy and Palepu, 2001).

The litigation risk framework suggests that both auditors and managers face increased legal exposure when information provided to investors is misleading or incomplete. This risk is particularly salient in the context of voluntary disclosures, where firms have discretion over the timing and content of information releases (Dye, 2001; Rogers and Van Buskirk, 2009).

Hypothesis Development

The relationship between strengthened auditor independence requirements and voluntary disclosure decisions operates through several interconnected channels within the litigation risk framework. When auditors face increased litigation exposure due to stricter independence requirements, they are likely to exercise greater scrutiny over both mandatory and voluntary firm disclosures (Francis and Krishnan, 1999; Cao and Narayanamoorthy, 2011). This enhanced scrutiny increases the expected costs of misleading disclosures for managers, potentially affecting both the quantity and quality of voluntary information releases.

The litigation risk channel suggests two competing effects on voluntary disclosure. On one hand, increased auditor scrutiny and litigation risk may lead firms to reduce voluntary disclosures to minimize legal exposure, particularly for forward-looking information or other disclosures that are difficult to verify (Johnson et al., 2001). On the other hand, enhanced auditor independence may increase the credibility of voluntary disclosures, potentially encouraging firms to provide more information to reduce information asymmetry and associated risk premiums (Verrecchia, 2001).

Prior literature suggests that the credibility enhancement effect is likely to dominate the risk-reduction effect for several reasons. First, enhanced auditor independence increases the perceived reliability of voluntary disclosures by providing stronger third-party verification

(Watts and Zimmerman, 1983). Second, reduced conflicts of interest between auditors and clients can lower the cost of capital benefits associated with voluntary disclosure by increasing investor confidence in reported information (Diamond and Verrecchia, 1991). Finally, stronger auditor independence requirements may actually reduce overall litigation risk by preventing disclosure-related problems before they occur.

H1: Following the implementation of the 2003 Auditor Independence Rules, firms increase their voluntary disclosure activities due to enhanced disclosure credibility through the litigation risk channel.

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 approach aligns with prior literature examining regulatory changes in auditor independence (DeFond et al., 2018; Francis and Wang, 2021).

Our primary empirical model examines the effect of Auditor Independence Rules on voluntary disclosure through the litigation risk channel:

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

where FreqMF represents the frequency of management forecasts, our measure of voluntary disclosure. The coefficient of interest, β_1, captures the treatment effect of the Auditor

Independence Rules. We include firm and year fixed effects to control for time-invariant firm characteristics and temporal trends, following the methodology of Rogers and Van Buskirk (2009).

To address potential endogeneity concerns, we employ a difference-in-differences design comparing treated firms to control firms that did not receive significant non-audit services pre-regulation. This approach helps isolate the causal effect of the regulation while controlling for concurrent events and general market trends (Christensen et al., 2016).

Variable Definitions

The dependent variable, FreqMF, is measured as the natural logarithm of one plus the number of management forecasts issued during the fiscal year. Treatment Effect is an indicator variable equal to one for firms affected by the Auditor Independence Rules in the post-regulation period, and zero otherwise.

Our control variables include established determinants of voluntary disclosure from prior literature. Institutional Ownership represents the percentage of shares held by institutional investors (Ajinkya et al., 2005). Firm Size is the natural logarithm of total assets. Book-to-Market is the ratio of book value of equity to market value of equity. ROA is return on assets, calculated as net income divided by total assets. Stock Return is the annual buy-and-hold return. Earnings Volatility is measured as the standard deviation of quarterly earnings over the previous five years. Loss is an indicator variable equal to one if net income is negative. Class Action Litigation Risk is estimated following Kim and Skinner (2012).

Sample Construction

Our sample period spans from 2001 to 2005, encompassing two years before and after the 2003 regulation. We obtain financial data from Compustat, stock return data from CRSP, analyst forecast data from I/B/E/S, and auditor data from Audit Analytics. We require firms to have non-missing values for all variables in our regression model.

We exclude financial institutions (SIC codes 6000-6999) and utilities (SIC codes 4900-4999) due to their distinct regulatory environments. The treatment group consists of firms that received significant non-audit services from their auditors prior to the regulation, while the control group includes firms that did not. This classification scheme follows the methodology established in prior studies examining regulatory changes in audit markets (DeFond and Zhang, 2014).

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 across a diverse set of firms during a period of significant regulatory change.

The key dependent variable, institutional ownership (linstown), exhibits a mean (median) of 0.406 (0.379), with a standard deviation of 0.293. The distribution appears relatively symmetric, as evidenced by the similar mean and median values. We observe substantial variation in institutional ownership, with interquartile ranges from 0.131 to 0.658, suggesting meaningful cross-sectional variation in our sample.

Firm size (lsize), measured as the natural logarithm of market capitalization, shows a mean of 5.408 and a median of 5.323, indicating a slightly right-skewed distribution. The book-to-market ratio (lbtm) has a mean of 0.683 and a median of 0.526, consistent with prior studies documenting a right-skewed distribution of this metric (e.g., Fama and French, 1992).

Profitability measures reveal interesting patterns. Return on assets (lroa) shows a mean of -0.073 but a median of 0.014, indicating a left-skewed distribution. This pattern, combined with the loss indicator variable (lloss) mean of 0.359, suggests that approximately 36% of our sample observations represent loss-making firms, which is consistent with prior literature documenting the increasing frequency of reported losses over time (Hayn, 1995).

Stock return volatility (levol) exhibits a mean of 0.168 with a notably lower median of 0.059, indicating significant right skewness. The calculated risk measure (lcalrisk) shows a mean (median) of 0.440 (0.345), with substantial variation as evidenced by its standard deviation of 0.347.

Management forecast frequency (freqMF) has a mean of 0.647 and a median of 0.000, suggesting that while many firms do not provide forecasts, those that do tend to provide multiple forecasts. The post-law indicator variable shows that 57% of our observations fall in the post-regulation period.

These descriptive statistics are generally consistent with prior studies examining similar phenomena in the post-Sarbanes-Oxley era (e.g., Cohen et al., 2008). The distributions of our key variables suggest no serious outlier concerns that might unduly influence our analyses, though we note some expected skewness in variables such as size and return measures that is typical in accounting research.

RESULTS

Regression Analysis

We find that the implementation of the 2003 Auditor Independence Rules has a significant impact on voluntary disclosure activities, though the direction of the effect varies across model specifications. In the baseline specification (1), we document a positive treatment effect of 0.0882 ($t=7.37$, $p<0.001$), suggesting that firms increase their voluntary disclosure following the regulatory change. However, after controlling for firm characteristics in specification (2), the treatment effect becomes negative (-0.0284) while remaining statistically significant ($t=-2.78$, $p<0.01$).

The economic magnitude of these effects is meaningful. The baseline specification indicates an 8.82% increase in voluntary disclosure, while the more robust specification with controls suggests a 2.84% decrease. The substantial change in the treatment effect between specifications (1) and (2) highlights the importance of controlling for firm characteristics in isolating the regulatory impact. The increase in R-squared from 0.0025 to 0.2893 indicates that specification (2) explains considerably more variation in voluntary disclosure behavior, suggesting it provides more reliable estimates of the treatment effect.

The control variables in specification (2) exhibit relationships consistent with prior literature on voluntary disclosure determinants. We find strong positive associations between voluntary disclosure and institutional ownership (0.8883, $t=33.46$), firm size (0.0903, $t=22.31$), profitability (0.1298, $t=6.63$), and litigation risk (0.2285, $t=14.48$). The negative relationship with loss firms (-0.2161, $t=-16.57$) aligns with previous findings that poorly performing firms tend to reduce voluntary disclosure. These results suggest that our model effectively captures known determinants of disclosure behavior. However, the negative treatment effect in our preferred specification (2) does not support Hypothesis 1, which predicted increased voluntary disclosure following the implementation of the 2003 Auditor Independence Rules. Instead, our findings suggest that the litigation risk reduction effect dominates the credibility enhancement effect, leading firms to adopt more conservative voluntary disclosure practices when facing enhanced auditor scrutiny. This result contributes to our understanding of how regulatory changes affecting auditor independence influence firms' disclosure decisions through the litigation risk channel.

CONCLUSION

This study examines how the 2003 Auditor Independence Rules affected voluntary disclosure through the litigation risk channel. We investigate whether enhanced auditor independence requirements led to changes in firms' voluntary disclosure practices by altering the litigation risk landscape for both auditors and their clients. Our analysis suggests that the strengthened independence requirements created a more robust audit environment where auditors face heightened scrutiny and potential legal exposure, thereby influencing their clients' disclosure decisions.

The implementation of stricter auditor independence requirements appears to have significantly altered the risk-reward calculus for voluntary disclosure. While we cannot establish direct causality, our analysis indicates that firms responded to the changed regulatory environment by adjusting their voluntary disclosure practices. This finding aligns with prior literature documenting how regulatory changes affect firms' disclosure choices through litigation risk considerations (e.g., Skinner 1994; Field et al. 2005). The economic magnitude of these effects suggests that the litigation risk channel represents a meaningful mechanism through which auditor independence requirements influence corporate disclosure policies.

Our findings contribute to the ongoing debate about the effectiveness of auditor independence regulations and their broader implications for financial markets. The results suggest that enhanced independence requirements not only affect the auditor-client relationship directly but also have spillover effects on corporate disclosure practices through the litigation risk channel. This extends previous work by Francis and Wang (2008) and DeFond and Zhang (2014) on the relationship between audit quality and financial reporting outcomes.

These findings have important implications for regulators and policymakers. The evidence suggests that auditor independence rules can influence corporate disclosure behavior beyond their primary objective of ensuring audit quality. Regulators should consider these indirect effects when designing and implementing future reforms to the audit profession. For corporate managers, our results highlight the importance of considering the litigation risk environment, as shaped by auditor independence requirements, when making voluntary disclosure decisions. Investors benefit from understanding how regulatory changes affecting auditors may influence the information environment through altered corporate disclosure practices.

The study faces several limitations that future research could address. First, the absence of a perfect counterfactual makes it challenging to isolate the causal effect of the independence requirements on voluntary disclosure. Future studies could exploit quasi-experimental settings or regulatory changes in other jurisdictions to better identify these effects. Second, our analysis focuses primarily on the litigation risk channel, but other mechanisms may also play important roles in how auditor independence requirements affect corporate disclosure. Researchers could explore alternative channels, such as reputational concerns or market discipline, through which independence requirements influence disclosure choices.

Future research could also examine how the interaction between auditor independence requirements and litigation risk affects specific types of voluntary disclosure, such as management forecasts, non-GAAP disclosures, or ESG reporting. Additionally, investigating how these effects vary across different institutional settings, legal regimes, and market conditions would provide valuable insights for both academics and practitioners. Such research could build on recent work by Lennox and Wu (2018) and DeFond et al. (2018) examining the broader consequences of audit regulation.

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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 Litigation 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.