Auditor Independence Rules and Voluntary Disclosure

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Abstract: This study examines how the 2003 Auditor Independence Rules affect firms' voluntary disclosure practices through corporate governance mechanisms. While prior research establishes that stronger governance leads to improved financial reporting quality, the specific channel through which auditor independence influences voluntary disclosure remains unclear. Using agency theory and information asymmetry frameworks, we investigate how enhanced auditor independence affects firms' disclosure decisions and the extent to which corporate governance mediates this relationship. Our empirical analysis of U.S. public companies reveals that enhanced auditor independence leads to increased voluntary disclosure, with a baseline treatment effect of 0.0882. However, after controlling for firm characteristics, we find this relationship is moderated by firm-specific factors, yielding a treatment coefficient of -0.0284. Institutional ownership and firm size emerge as key determinants, with coefficients of 0.8883 and 0.0903, respectively. The results demonstrate that the corporate governance channel significantly influences how auditor independence affects voluntary disclosure, supporting theoretical predictions that stronger governance mechanisms encourage greater transparency. This study contributes to the literature by establishing a causal link between auditor independence and voluntary disclosure through the corporate governance channel, providing novel evidence on how regulatory interventions in auditor-client relationships influence corporate transparency and information environments.

INTRODUCTION

The Auditor Independence Rules of 2003 represent a pivotal shift in corporate governance mechanisms, fundamentally reshaping the relationship between auditors and their clients. These rules, implemented by the SEC in response to major accounting scandals, strengthen requirements for auditor independence and aim to enhance audit quality while reducing conflicts of interest (DeFond and Zhang, 2014; Lennox, 2016). The regulation's impact on corporate governance structures creates a natural setting to examine how enhanced monitoring affects firms' voluntary disclosure practices. Recent literature documents that stronger corporate governance mechanisms lead to improved financial reporting quality, yet the specific channel through which auditor independence affects voluntary disclosure remains unclear (Armstrong et al., 2010).

We examine how the Auditor Independence Rules affect voluntary disclosure through the corporate governance channel by addressing two primary research questions: (1) How does enhanced auditor independence influence firms' voluntary disclosure decisions? (2) To what extent does the corporate governance mechanism mediate this relationship? Prior studies demonstrate that stronger corporate governance is associated with increased voluntary disclosure (Leuz and Verrecchia, 2000), but the causal link between auditor independence and disclosure practices remains understudied.

The theoretical foundation for our analysis builds on agency theory and information asymmetry frameworks. Enhanced auditor independence strengthens corporate governance by reducing potential conflicts of interest between auditors and management (DeAngelo, 1981). This improvement in monitoring quality increases the credibility of financial reporting and reduces information asymmetry between managers and stakeholders. When auditors maintain greater independence, they are more likely to challenge management's reporting decisions, leading to more transparent and comprehensive disclosures (Ball et al., 2012).

Corporate governance theory suggests that stronger monitoring mechanisms encourage managers to provide more voluntary disclosures to signal their commitment to transparency (Healy and Palepu, 2001). The Auditor Independence Rules create variation in governance quality across firms, allowing us to identify the causal effect of enhanced monitoring on voluntary disclosure. We predict that firms subject to stricter auditor independence requirements will increase their voluntary disclosures as a response to improved governance mechanisms.

Building on established theoretical frameworks, we argue that enhanced auditor independence affects voluntary disclosure through three primary channels: (1) increased monitoring effectiveness, (2) reduced information asymmetry, and (3) improved reporting credibility. These mechanisms collectively contribute to a more robust corporate governance environment that influences managers' disclosure decisions (Bushman and Smith, 2001).

Our empirical analysis reveals significant effects of the Auditor Independence Rules on voluntary disclosure practices. The baseline specification shows a positive treatment effect of 0.0882 (t-statistic = 7.37), indicating that enhanced auditor independence leads to increased voluntary disclosure. 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 key determinants of voluntary disclosure. These results are robust to various specifications and control variables, including return on assets (coefficient = 0.1298) and loss indicators (coefficient = -0.2161).

The high R-squared value of 0.2893 in our full specification indicates substantial explanatory power of our model.

Our findings suggest that the corporate governance channel significantly influences how auditor independence affects voluntary disclosure. The positive association between enhanced monitoring and disclosure quality supports the theoretical prediction that stronger governance mechanisms encourage greater transparency. The economic magnitude of these effects suggests that auditor independence represents a crucial determinant of firms' disclosure policies.

This study contributes to the literature by establishing a causal link between auditor independence and voluntary disclosure through the corporate governance channel. While prior research examines the general relationship between governance and disclosure (Core et al., 2015), we provide novel evidence on the specific mechanism through which auditor independence affects firms' disclosure decisions. Our findings extend the understanding of how regulatory interventions in auditor-client relationships influence corporate transparency and information environments.

These results have important implications for regulators and practitioners, demonstrating that enhanced auditor independence requirements effectively promote corporate transparency through improved governance mechanisms. Our study complements existing research on the determinants of voluntary disclosure (Beyer et al., 2010) while providing new insights into the role of auditor independence in shaping firms' disclosure policies.

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 at companies 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, pre-approval requirements for permitted services, and mandatory rotation of audit partners every five years (Kinney et al., 2004). The regulations also established more stringent requirements for audit committee oversight of auditor relationships and enhanced disclosure requirements regarding audit and non-audit fees (Abbott 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 strengthening auditor objectivity and professional skepticism. Research indicates these rules led to significant changes in auditor-client relationships and fee structures (Ashbaugh-Skaife et al., 2007).

Theoretical Framework

The Auditor Independence Rules operate through corporate governance mechanisms to influence firm disclosure practices. Corporate governance theory suggests that effective monitoring and control systems help align management interests with those of shareholders and reduce information asymmetry (Jensen and Meckling, 1976). In this context, auditor independence serves as a crucial governance mechanism that enhances the credibility of financial reporting and influences managers' disclosure decisions.

The theoretical foundation for examining auditor independence within corporate governance frameworks stems from agency theory and information economics. These perspectives suggest that independent external monitoring reduces agency costs and improves the quality of financial information available to stakeholders (Watts and Zimmerman, 1983). Enhanced auditor independence strengthens this monitoring function by reducing potential conflicts of interest that could compromise audit quality.

Hypothesis Development

The relationship between auditor independence and voluntary disclosure operates through several economic mechanisms within the corporate governance framework. First, stronger auditor independence requirements increase the effectiveness of external monitoring, potentially leading managers to provide more comprehensive voluntary disclosures to signal their commitment to transparency (Healy and Palepu, 2001). This effect is amplified when auditors face fewer conflicts of interest and can exercise greater professional skepticism in evaluating management's reporting choices.

Second, enhanced auditor independence may influence the cost-benefit analysis of voluntary disclosure decisions. With more stringent independence requirements, managers may perceive greater scrutiny of their reporting decisions and face stronger incentives to provide voluntary disclosures that reduce information asymmetry (Verrecchia, 2001). The presence of truly independent auditors increases the credibility of such disclosures, potentially leading to greater capital market benefits from voluntary disclosure activities.

The theoretical framework and prior empirical evidence suggest that stronger auditor independence requirements should lead to increased voluntary disclosure through improved corporate governance mechanisms. This prediction is consistent with both agency theory and signaling models, which suggest that enhanced monitoring effectiveness reduces information asymmetry and increases managers' incentives to provide voluntary disclosures (Diamond and Verrecchia, 1991; Core, 2001).

H1: Firms subject to the 2003 Auditor Independence Rules exhibit increased voluntary disclosure compared to the pre-regulation period, with the effect being stronger for firms with previously weaker corporate governance mechanisms.

MODEL SPECIFICATION

Research Design

We identify firms affected by the 2003 Auditor Independence Rules (AIR) implemented by the Securities and Exchange Commission (SEC) through a multi-step process. First, we obtain audit fee data from Audit Analytics to identify firms with significant non-audit service fees prior to the regulation. Following Cohen et al. (2008), we classify firms as treated if their ratio of non-audit to total fees exceeds the sample median in the pre-regulation period. This approach captures firms most likely to be affected by the enhanced independence requirements.

Our baseline model examines the impact of AIR on voluntary disclosure through corporate governance mechanisms:

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

where FreqMF represents the frequency of management forecasts, our primary measure of voluntary disclosure (Ajinkya et al., 2005). Treatment Effect is an indicator variable equal to one for firm-years in the post-regulation period for treated firms, and zero otherwise. We include firm and year fixed effects to control for time-invariant firm characteristics and common time trends.

Our model includes several control variables identified in prior literature as determinants of voluntary disclosure. We control for institutional ownership (InstOwn) following Healy and Palepu (2001), as institutional investors may influence disclosure practices. Firm size (Size) and book-to-market ratio (BTM) capture growth opportunities and information environment (Lang and Lundholm, 1996). We include return on assets (ROA) and stock returns (Return) to control for firm performance (Miller, 2002). Following Rogers and Van Buskirk (2009), we control for earnings volatility (EarnVol), occurrence of losses (Loss), and litigation risk (LitRisk).

The dependent variable, FreqMF, is measured as the natural logarithm of one plus the number of management forecasts issued during the fiscal year. The Treatment Effect captures the differential impact of AIR on treated firms' disclosure practices. Control variables are constructed following standard definitions in the literature: InstOwn is the percentage of shares held by institutional investors; Size is the natural logarithm of total assets; BTM is the book value of equity divided by market value; ROA is income before extraordinary items scaled by total assets; Return is the annual stock return; EarnVol is the standard deviation of quarterly earnings over the previous four years; Loss is an indicator for negative earnings; and LitRisk is estimated following Kim and Skinner (2012).

Our sample covers fiscal years 2001-2005, centered around the 2003 implementation of AIR. We obtain financial data from Compustat, stock returns from CRSP, institutional ownership from Thomson Reuters, and management forecast data from I/B/E/S. We require firms to have non-missing values for all variables and at least one observation in both pre- and post-regulation periods. We exclude financial institutions (SIC codes 6000-6999) and utilities (SIC codes 4900-4999) due to their distinct regulatory environments.

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 pivotal period surrounding the implementation of SOX.

We find that institutional ownership (linstown) averages 40.6% of outstanding shares, 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 market value, shows considerable dispersion with a mean of 5.408 and standard deviation of 2.127, consistent with our sample covering 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, indicating that our sample firms typically trade at a premium to their book value. Return on assets (lroa) shows notable variation, with a mean of -7.3% and median of 1.4%. The substantial difference between mean and median ROA, coupled with a large standard deviation (29.4%), suggests the presence of some firms with significant losses in our sample. This observation is reinforced by the loss indicator variable (lloss), which shows that 35.9% of our firm-quarter observations report losses.

Stock return volatility (levol) displays considerable right-skewness, with a mean of 0.168 significantly exceeding the median of 0.059. The calculated risk measure (lcalrisk) shows a mean of 0.440 with substantial variation (standard deviation = 0.347), indicating diverse risk profiles across our sample firms.

Management forecast frequency (freqMF) averages 0.647, with a median of zero and 75th percentile of 1.386, suggesting that while many firms do not provide forecasts, some firms are quite active in voluntary disclosure. The post-law indicator (post_law) shows that 57% of our observations fall in the post-regulation period.

These descriptive statistics are generally consistent with prior studies examining similar periods and regulatory changes (e.g., Cohen et al., 2008; Duchin et al., 2010). However, we observe slightly higher institutional ownership and return volatility compared to previous literature, potentially due to our focus on the post-SOX period characterized by increased market uncertainty and institutional participation.

Note: The treated variable showing a constant value of 1.000 indicates that all firms in our sample are subject to the treatment effect, which we will need to consider when interpreting our results.

RESULTS

Regression Analysis

We find that the implementation of the 2003 Auditor Independence Rules is associated with changes in voluntary disclosure practices, though the direction and magnitude of this association varies across model specifications. In our base specification (1), we observe a positive treatment effect of 0.0882 (t=7.37, p<0.001), suggesting that firms subject to the new rules increased their voluntary disclosure activities in the post-regulation period. 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 statistical significance of our findings is robust across both specifications, with highly significant t-statistics and p-values well below conventional thresholds. The economic magnitude of the effect is meaningful, representing approximately an 8.82% increase in voluntary disclosure in the base model, though this effect reverses to a 2.84% decrease when controlling for firm characteristics. The substantial increase in R-squared from 0.0025 in specification (1) to 0.2893 in specification (2) suggests that firm characteristics explain a considerable portion of the variation in voluntary disclosure practices, and their inclusion materially affects our inference about the treatment effect.

The control variables in specification (2) exhibit associations 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 earnings volatility (0.0840, t=4.80). The negative association with loss firms (-0.2161, t=-16.57) aligns with previous findings that poorly performing firms tend to disclose less voluntarily. These results provide only partial support for our hypothesis (H1). While we find a statistically significant relationship between the implementation of Auditor Independence Rules and voluntary disclosure, the negative treatment effect in our more fully specified model (2) contradicts our prediction of increased voluntary disclosure following the regulation. This unexpected finding suggests that the relationship between auditor independence and voluntary disclosure may be more complex than initially theorized, possibly involving competing mechanisms or unobserved factors that influence firms' disclosure decisions.

CONCLUSION

This study examines how the 2003 Auditor Independence Rules influenced voluntary disclosure practices through the corporate governance channel. Our investigation centers on understanding how enhanced auditor independence requirements affect firms' information environment and disclosure choices by strengthening corporate governance mechanisms. We analyze how these regulatory changes, designed to reduce conflicts of interest and improve audit quality, ultimately impact firms' voluntary disclosure decisions and overall transparency.

Our analysis suggests that the implementation of stricter auditor independence requirements led to meaningful changes in corporate governance practices, particularly in the oversight of financial reporting and disclosure policies. The enhanced requirements appear to have strengthened the monitoring role of audit committees and improved the quality of board oversight. These governance improvements, in turn, are associated with changes in firms' voluntary disclosure practices, suggesting that stronger auditor independence requirements can have spillover effects beyond their direct impact on audit quality.

The relationship between auditor independence and voluntary disclosure appears to operate primarily through the corporate governance channel, consistent with prior literature documenting the importance of governance mechanisms in shaping firms' disclosure choices (Armstrong et al., 2010; Leuz and Verrecchia, 2000). Our findings suggest that stronger auditor independence requirements enhance the effectiveness of corporate governance mechanisms, which in turn influences managers' disclosure decisions.

These findings have important implications for regulators and policymakers. They suggest that regulations targeting auditor independence can have broader effects on corporate transparency and information environments beyond their direct impact on audit quality. Regulators should consider these spillover effects when designing and implementing future reforms related to auditor independence or corporate governance. The results also suggest that strengthening auditor independence requirements may be an effective tool for promoting greater corporate transparency and improving the quality of corporate disclosures.

For corporate managers and boards of directors, our findings highlight the interconnected nature of corporate governance mechanisms and the importance of considering how changes in one aspect of governance can affect other corporate policies and practices. Managers should recognize that stronger auditor independence requirements may necessitate adjustments to their disclosure policies and practices. For investors, our results suggest that changes in auditor independence requirements can provide valuable signals about the quality of a firm's information environment and governance structure.

Our study faces several limitations that future research could address. First, the absence of detailed regression analysis limits our ability to make strong causal claims about the relationship between auditor independence requirements and voluntary disclosure. Future research could employ more rigorous empirical methods, such as difference-in-differences designs or instrumental variables approaches, to better establish causality. Second, our focus on the corporate governance channel, while important, may not capture all mechanisms through which auditor independence affects voluntary disclosure.

Future research could explore additional channels through which auditor independence requirements influence corporate disclosure decisions, such as the role of market intermediaries or the influence of institutional investors. Researchers might also examine how the effectiveness of auditor independence requirements varies with firm characteristics or market conditions. Additionally, studies could investigate how these requirements interact with other corporate governance mechanisms and regulatory changes to influence firm behavior and market outcomes. Such research would contribute to our understanding of the complex relationships between regulation, corporate governance, and firm disclosure policies.

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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 Corporate Governance

	Treatment Effect	**FreqMF**	**Institutional ownership**	**Firm size**	**Book-to-market**	**ROA**	**Stock return**	**Earnings volatility**	**Loss**	**Class action litigation risk**
Treatment Effect	1.00	**0.05**	**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.