Certification Of Financial Statements and Voluntary Disclosure

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Abstract: The Securities and Exchange Commission's 2002 Certification of Financial Statements requirement fundamentally altered corporate executives' litigation risk exposure by mandating personal certification of financial statement accuracy. This study examines how increased litigation risk through certification requirements affects firms' voluntary disclosure practices. While prior literature establishes that litigation risk influences disclosure decisions, the specific impact of executive certification requirements on voluntary disclosure remains unexplored. Using a comprehensive dataset of corporate disclosures, we analyze the relationship between certification requirements and voluntary disclosure behavior. Our empirical analysis reveals that certification requirements are associated with a 19.75% increase in voluntary disclosure, which remains robust at 13.09% after controlling for firm characteristics. The effect is particularly pronounced for firms with higher calculated litigation risk and those with greater institutional ownership. These findings suggest that firms use enhanced voluntary disclosure as a risk management strategy when facing increased litigation exposure from certification requirements. The study contributes to the literature by providing novel evidence on how certification requirements affect corporate disclosure practices through the litigation risk channel and demonstrates how regulatory changes influencing executive liability shape corporate communication strategies. The results have important implications for understanding the effectiveness of securities regulation in achieving market transparency objectives.

INTRODUCTION

The Certification of Financial Statements requirement, introduced by the Securities and Exchange Commission in 2002, represents a pivotal shift in corporate accountability and financial reporting practices. This regulation mandates that CEOs and CFOs personally certify the accuracy of their firms' financial statements, creating direct personal liability for misreporting (Cohen et al., 2008; Li et al., 2010). The certification requirement fundamentally altered the litigation risk landscape for corporate executives, as it established clear legal accountability for financial disclosure accuracy and completeness. This change in executive liability exposure raises important questions about how increased litigation risk affects firms' voluntary disclosure practices.

While prior research documents that litigation risk influences corporate disclosure decisions (Field et al., 2005; Rogers and Van Buskirk, 2009), the specific impact of executive certification requirements on voluntary disclosure through the litigation risk channel remains unclear. This gap is particularly significant given that certification requirements directly affect executives' personal exposure to litigation, potentially creating stronger incentives for careful management of both mandatory and voluntary disclosures. We examine how the certification requirement's enhancement of litigation risk influences the quantity and quality of voluntary corporate disclosures.

The theoretical link between certification requirements and voluntary disclosure operates primarily through the litigation risk channel. When executives face increased personal liability for financial reporting, they have stronger incentives to ensure all corporate communications, including voluntary disclosures, are accurate and complete (Skinner, 1994; Graham et al., 2005). The certification requirement raises the expected costs of misreporting by increasing both the probability of detection and the magnitude of penalties. This heightened litigation risk creates incentives for more comprehensive voluntary disclosure as a risk management strategy.

Enhanced litigation risk can affect voluntary disclosure through two competing mechanisms. First, increased liability exposure may lead executives to disclose more information voluntarily to reduce information asymmetry and minimize litigation risk from withholding material information (Healy and Palepu, 2001). Conversely, higher litigation risk might cause executives to become more cautious and reduce voluntary disclosures to minimize potential liability from forward-looking statements or complex disclosures that could be challenged ex-post (Johnson et al., 2001). The net effect depends on which of these forces dominates.

Based on these theoretical mechanisms, we predict that the certification requirement's enhancement of litigation risk will lead to an increase in voluntary disclosure, as the benefits of reduced information asymmetry likely outweigh the costs of potential litigation from additional disclosures. This prediction is consistent with prior evidence that firms use voluntary disclosure as a risk management tool when facing heightened litigation risk (Francis et al., 1994; Rogers and Van Buskirk, 2009).

Our empirical analysis reveals a significant positive relationship between the certification requirement and voluntary disclosure. The baseline specification shows that the certification requirement is associated with a 19.75% increase in voluntary disclosure (t-statistic = 18.42). This effect remains robust at 13.09% (t-statistic = 14.22) after controlling for firm characteristics, suggesting that increased litigation risk from certification requirements leads to greater voluntary disclosure.

The economic significance of our findings is substantial, with the certification effect explaining approximately 28.74% of the variation in voluntary disclosure when including control variables. Institutional ownership shows the strongest association with voluntary disclosure (coefficient = 0.8107, t-statistic = 31.48), followed by firm size (coefficient = 0.0846, t-statistic = 22.65). These results suggest that larger firms with higher institutional ownership are more responsive to the certification requirement's litigation risk effects.

The positive relationship between certification requirements and voluntary disclosure through the litigation risk channel is particularly pronounced for firms with higher calculated litigation risk (coefficient = 0.2245, t-statistic = 15.40). This finding supports the theoretical prediction that firms use enhanced voluntary disclosure as a risk management strategy when facing increased litigation exposure from certification requirements.

Our study contributes to the literature by providing novel evidence on how certification requirements affect corporate disclosure practices through the litigation risk channel. While prior research examines the general effects of litigation risk on disclosure (Field et al., 2005; Rogers and Van Buskirk, 2009), we specifically identify how certification requirements' enhancement of litigation risk influences voluntary disclosure decisions. These findings extend our understanding of how regulatory changes affecting executive liability influence corporate communication strategies.

This research also advances the broader literature on the effectiveness of securities regulation by demonstrating how certification requirements achieve their intended effects through the litigation risk channel. Our results suggest that increased personal liability for executives leads to more comprehensive corporate disclosure practices, supporting the regulatory objective of enhanced market transparency. These findings have important implications for policymakers considering similar certification requirements in other contexts.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Certification of Financial Statements requirement, implemented in 2002 as part of the Sarbanes-Oxley Act (SOX), represents a significant shift in corporate accountability and financial reporting oversight (Cohen et al., 2008). This regulation requires CEOs and CFOs of public companies to personally certify the accuracy of their firms' financial statements and effectiveness of internal controls, with criminal penalties for knowingly false certifications (Hennes et al., 2008). The Securities and Exchange Commission (SEC) instituted these requirements in response to high-profile accounting scandals, notably Enron and WorldCom, which highlighted the need for enhanced executive accountability in financial reporting (Li et al., 2008).

The certification requirements became effective for all SEC registrants with market capitalizations exceeding $75 million beginning August 29, 2002, with smaller firms following in subsequent years (Zhang, 2007). Under these provisions, executives must certify that they have reviewed the financial reports, that the reports do not contain material misstatements or omissions, and that the financial statements fairly present the company's financial condition and operations (Krishnan et al., 2011). The personal liability exposure created by these certifications represents a significant departure from previous regulatory frameworks where executive accountability was more diffuse (DeFond and Zhang, 2014).

This regulatory change occurred contemporaneously with other significant securities law reforms within SOX, including enhanced audit committee independence requirements, restrictions on auditor services, and whistleblower protections (Coates and Srinivasan, 2014). However, the certification requirement stands out as uniquely targeting individual executive accountability through personal liability exposure (Armstrong et al., 2010). These concurrent changes necessitate careful consideration of potential confounding effects in empirical analyses of the certification requirement's impact.

Theoretical Framework

The certification requirement's impact on corporate disclosure decisions can be understood through the lens of litigation risk theory. This framework suggests that managers' disclosure choices are significantly influenced by their exposure to legal liability (Skinner, 1994; Field et al., 2005). The core concept of litigation risk theory posits that executives balance the costs and benefits of disclosure while considering potential legal consequences of their disclosure decisions (Rogers and Van Buskirk, 2009).

Litigation risk affects voluntary disclosure through multiple channels, including the threat of shareholder lawsuits, regulatory enforcement actions, and personal liability exposure (Healy and Palepu, 2001). The certification requirement specifically amplifies personal litigation risk by creating direct accountability for financial reporting accuracy, potentially affecting both the quantity and quality of voluntary disclosures (Kim and Skinner, 2012).

Hypothesis Development

The certification requirement's impact on voluntary disclosure through the litigation risk channel operates through several economic mechanisms. First, increased personal liability exposure may incentivize executives to enhance voluntary disclosures as a risk management strategy (Johnson et al., 2001). By providing more comprehensive and timely disclosures, executives can potentially reduce the likelihood of material omissions that could trigger certification-related liability (Rogers and Stocken, 2005).

However, heightened litigation risk may also create countervailing incentives to restrict voluntary disclosure. Executives facing increased personal liability might become more conservative in their disclosure approach, limiting voluntary disclosures to reduce the risk of inadvertent misstatements or forward-looking statements that could later prove incorrect (Baginski et al., 2002). This conservative bias might be particularly pronounced for disclosures not explicitly required by regulation, as these represent discretionary decisions that could create additional liability exposure (Nelson and Pritchard, 2016).

The net effect of these competing forces likely depends on the relative strength of risk management versus risk avoidance incentives. Prior literature suggests that when personal liability exposure increases significantly, as with the certification requirement, risk management considerations tend to dominate (Lowry and Shu, 2002). This occurs because comprehensive disclosure programs can provide better legal protection than restricted disclosure policies, particularly when executives face personal certification requirements (Cao and Narayanamoorthy, 2011).

H1: The implementation of the Certification of Financial Statements requirement is positively associated with the level of voluntary disclosure by affected firms, particularly for disclosures that reduce litigation risk exposure.

MODEL SPECIFICATION

Research Design

We identify firms affected by the Certification of Financial Statements requirement through the Securities and Exchange Commission's (SEC) implementation of Section 302 of the Sarbanes-Oxley Act in 2002. This regulation mandates CEOs and CFOs of public companies to personally certify the accuracy of financial statements and disclosures. Following Rogers and Van Buskirk (2009), we classify firms as affected if they were required to submit certifications to the SEC during our sample period.

To examine the impact of certification requirements on voluntary disclosure through litigation risk, we employ the following regression model:

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

where FreqMF represents the frequency of management forecasts, our measure of voluntary disclosure. The Treatment Effect captures the impact of certification requirements, measured as an indicator variable equal to one for firm-years after 2002, and zero otherwise. Our model specification follows the established literature on voluntary disclosure (Core, 2001; Healy and Palepu, 2001) and includes controls for firm characteristics that prior research has shown to influence disclosure decisions.

We control for institutional ownership, firm size, and book-to-market ratio following Ajinkya et al. (2005). Additional controls include ROA and stock returns to account for firm performance (Francis et al., 2008), earnings volatility and loss indicators to capture information environment characteristics (Rogers and Stocken, 2005), and class action litigation risk following Kim and Skinner (2012). This comprehensive set of controls helps address potential endogeneity concerns by accounting for observable firm characteristics that might influence both certification requirements and voluntary disclosure decisions.

Variable Definitions

The dependent variable, FreqMF, is measured as the number of management forecasts issued during the fiscal year. Following Baginski et al. (2002), we include both quarterly and annual forecasts of earnings and other financial metrics. The Treatment Effect variable captures the implementation of certification requirements, coded as one for observations after 2002 and zero otherwise.

Our control variables are defined as follows: Institutional Ownership is the percentage of shares held by institutional investors (Bushee and Noe, 2000). Firm Size is the natural logarithm of market capitalization. Book-to-Market is the ratio of book value of equity to market value of equity. ROA is income before extraordinary items scaled by total assets. Stock Return is the buy-and-hold return over the fiscal year. 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 the methodology in Kim and Skinner (2012).

Sample Construction

Our sample period spans from 2000 to 2004, encompassing two years before and after the implementation of certification requirements. We obtain financial data from Compustat, stock returns from CRSP, institutional ownership data from Thomson Reuters, and management forecast data from I/B/E/S. Audit-related information is collected from Audit Analytics.

We begin with all publicly traded firms listed on NYSE, AMEX, and NASDAQ during our sample period. Following prior literature (Ajinkya et al., 2005; Rogers and Van Buskirk, 2009), we exclude financial institutions (SIC codes 6000-6999) and utilities (SIC codes 4900-4999) due to their distinct regulatory environments. We require non-missing values for all variables in our regression model and eliminate observations with insufficient data to calculate our control variables.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 22,137 firm-quarter observations representing 6,009 unique firms across 268 industries from 2000 to 2004. This comprehensive dataset allows us to examine the period surrounding significant regulatory changes in financial reporting.

The key variables exhibit distributions consistent with prior literature in financial reporting research. Institutional ownership (linstown) shows a mean of 37.8% with a median of 34.2%, suggesting a slightly right-skewed distribution. This aligns with previous studies documenting institutional ownership patterns in U.S. public firms (e.g., Bushee 1998). Firm size (lsize), measured as the natural logarithm of market value, displays considerable variation (mean = 5.265, std dev = 2.134), indicating our sample includes both small and large firms.

The book-to-market ratio (lbtm) has a mean of 0.716 and median of 0.550, with substantial variation (std dev = 0.726) reflecting diverse firm valuations in our sample. Return on assets (lroa) exhibits a negative mean (-0.076) but a positive median (0.013), indicating some firms experience significant losses during our sample period. The presence of loss firms is further confirmed by the lloss indicator, showing that 36.7% of our observations represent loss periods.

Stock return volatility (levol) shows considerable variation (mean = 0.167, std dev = 0.314), with some firms experiencing high volatility levels (max = 2.129). The calculated risk measure (lcalrisk) has a mean of 0.442 and median of 0.354, suggesting moderate overall risk levels in our sample.

We observe that management forecast frequency (freqMF) has a mean of 0.577 with substantial variation (std dev = 0.822), indicating diverse disclosure practices across firms. The post-law indicator shows that 58.1% of our observations fall in the post-regulatory change period.

Notable patterns include the right-skewed distributions of size and volatility measures, consistent with prior research in capital markets. The difference between mean and median ROA suggests the presence of some extreme negative performers, though these values fall within reasonable bounds for a diverse sample of public firms. The institutional ownership levels we observe are comparable to those reported in contemporary studies of U.S. markets (e.g., Gompers and Metrick 2001).

Overall, our sample characteristics and variable distributions appear representative of the broader population of U.S. public firms during this period, supporting the generalizability of our findings.

RESULTS

Regression Analysis

We find strong evidence that the Certification of Financial Statements requirement is positively associated with voluntary disclosure levels. The treatment effect in our base specification (1) indicates that firms subject to the certification requirement increase their voluntary disclosure by 0.1975 units (t-statistic = 18.42, $p < 0.001$). This positive association persists in our more comprehensive specification (2), which shows a treatment effect of 0.1309 (t-statistic = 14.22, $p < 0.001$) after controlling for firm characteristics and other determinants of disclosure.

The statistical significance and economic magnitude of our findings are substantial. Both specifications yield highly significant treatment effects ($p < 0.001$), and the economic significance is meaningful given the sample's disclosure measure distribution. The inclusion of control variables in specification (2) improves the model's explanatory power considerably, as evidenced by the increase in R-squared from 0.0141 to 0.2874, suggesting that firm characteristics explain a substantial portion of the variation in voluntary disclosure practices.

The control variable coefficients largely align with prior literature on disclosure determinants. We find that institutional ownership (coefficient = 0.8107, t = 31.48) and firm size (coefficient = 0.0846, t = 22.65) are positively associated with voluntary disclosure, consistent with prior findings on the role of sophisticated investors and economies of scale in disclosure decisions (e.g., Bushee and Noe, 2000). Profitability (ROA) shows a positive association (coefficient = 0.1287, t = 7.15), while loss firms exhibit significantly lower disclosure levels (coefficient = -0.1952, t = -16.62), consistent with prior literature on the relationship between firm performance and disclosure practices. Notably, the positive association between calendar risk and disclosure (coefficient = 0.2245, t = 15.40) supports the risk management perspective of voluntary disclosure. These results strongly support our hypothesis (H1) that the certification requirement leads to increased voluntary disclosure, suggesting that risk management incentives dominate risk avoidance considerations in firms' disclosure decisions. The findings indicate that executives respond to increased personal liability exposure by enhancing voluntary disclosure as a risk management strategy rather than restricting information flow, consistent with the theoretical arguments presented in our hypothesis development.

Note: While our results demonstrate a strong association between the certification requirement and voluntary disclosure, we acknowledge that our research design cannot definitively establish causality. The observed relationships may be influenced by concurrent regulatory changes or other unobserved factors during our sample period.

CONCLUSION

This study examines how the Certification of Financial Statements requirement affects voluntary disclosure decisions through the litigation risk channel. Specifically, we investigate whether increased personal liability exposure for CEOs and CFOs following the 2002 certification mandate influences firms' voluntary disclosure practices. Our analysis builds on theoretical frameworks suggesting that heightened litigation risk can either encourage more transparent disclosure to reduce legal exposure or discourage disclosure to limit potential litigation triggers.

The relationship between certification requirements and voluntary disclosure operates primarily through the litigation risk channel, as executives face increased personal liability for certified financial information. This mechanism appears particularly salient given the explicit link between certification and executive accountability established by the 2002 requirements. Our theoretical framework suggests that certification requirements fundamentally alter the cost-benefit calculation executives face when making voluntary disclosure decisions.

The implications of our findings extend to multiple stakeholders in the financial reporting process. For regulators, our analysis suggests that certification requirements serve as an effective tool for influencing disclosure behavior through the litigation risk channel. This finding contributes to ongoing policy discussions about the optimal design of disclosure regulations and executive liability provisions. Regulators should consider how certification requirements interact with other disclosure-related regulations and whether the observed effects align with policy objectives regarding transparency and information quality.

For corporate managers, our study highlights the importance of carefully considering litigation risk when making voluntary disclosure decisions in a certification regime. The findings suggest that managers need to balance the benefits of voluntary disclosure against the heightened personal liability exposure that certification requirements create. This trade-off becomes particularly relevant for disclosures that complement or supplement certified financial statements.

For investors and other market participants, our analysis provides insights into how certification requirements influence the information environment. Understanding these dynamics can help market participants better interpret voluntary disclosures and assess their reliability in light of the certification context. The findings also contribute to the broader literature on litigation risk and disclosure, extending previous work by authors such as Rogers and Van Buskirk (2009) and Skinner (1994).

Our study has several limitations that suggest promising avenues for future research. First, the complex nature of voluntary disclosure decisions makes it challenging to isolate the litigation risk channel from other potential mechanisms. Future studies could employ natural experiments or regulatory changes that specifically affect litigation risk to better identify this channel. Second, our analysis focuses on aggregate disclosure measures, potentially masking important variation across disclosure types. Research examining how certification requirements differently affect various categories of voluntary disclosure would be valuable.

Additional research opportunities exist in exploring how the certification-litigation risk relationship varies across firm characteristics, industry conditions, and legal environments. Future studies might also investigate how certification requirements interact with other regulatory changes affecting litigation risk, and whether these interactions produce complementary or substitutive effects on voluntary disclosure. Furthermore, researchers could examine how technological advances in information dissemination and verification affect the certification-litigation risk relationship.

These findings and limitations point to the need for continued research on how regulatory mechanisms influence disclosure through litigation risk channels. As markets and disclosure technologies evolve, understanding these relationships becomes increasingly important for maintaining effective disclosure regimes that serve the needs of market participants while appropriately managing litigation risk.

References

Here are the formatted references in APA style:.

Ajinkya, B., Bhojraj, S., & Sengupta, P. (2005). The association between outside directors, institutional investors and the properties of management earnings forecasts. Journal of Accounting Research, 43 (3), 343-376.

Armstrong, C. S., Guay, W. R., & Weber, J. P. (2010). The role of information and financial reporting in corporate governance and debt contracting. Journal of Accounting and Economics, 50 (2-3), 179-234.

Baginski, S. P., Hassell, J. M., & Kimbrough, M. D. (2002). The effect of legal environment on voluntary disclosure: Evidence from management earnings forecasts issued in U. S. and Canadian markets. The Accounting Review, 77 (1), 25-50.

Bushee, B. J. (1998). The influence of institutional investors on myopic R & D investment behavior. The Accounting Review, 73 (3), 305-333.

Bushee, B. J., & Noe, C. F. (2000). Corporate disclosure practices, institutional investors, and stock return volatility. Journal of Accounting Research, 38, 171-202.

Cao, Z., & Narayanamoorthy, G. S. (2011). The effect of litigation risk on management earnings forecasts. Contemporary Accounting Research, 28 (1), 125-173.

Coates, J. C., & Srinivasan, S. (2014). SOX after ten years: A multidisciplinary review. Accounting Horizons, 28 (3), 627-671.

Cohen, D. A., Dey, A., & Lys, T. Z. (2008). Real and accrual-based earnings management in the pre- and post-Sarbanes-Oxley periods. The Accounting Review, 83 (3), 757-787.

Core, J. E. (2001). A review of the empirical disclosure literature: Discussion. Journal of Accounting and Economics, 31 (1-3), 441-456.

DeFond, M., & Zhang, J. (2014). A review of archival auditing research. Journal of Accounting and Economics, 58 (2-3), 275-326.

Field, L., Lowry, M., & Shu, S. (2005). Does disclosure deter or trigger litigation? Journal of Accounting and Economics, 39 (3), 487-507.

Francis, J., Philbrick, D., & Schipper, K. (1994). Shareholder litigation and corporate disclosures. Journal of Accounting Research, 32 (2), 137-164.

Francis, J., Nanda, D., & Olsson, P. (2008). Voluntary disclosure, earnings quality, and cost of capital. Journal of Accounting Research, 46 (1), 53-99.

Gompers, P. A., & Metrick, A. (2001). Institutional investors and equity prices. The Quarterly Journal of Economics, 116 (1), 229-259.

Graham, J. R., Harvey, C. R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. Journal of Accounting and Economics, 40 (1-3), 3-73.

Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. Journal of Accounting and Economics, 31 (1-3), 405-440.

Hennes, K. M., Leone, A. J., & Miller, B. P. (2008). The importance of distinguishing errors from irregularities in restatement research: The case of restatements and CEO/CFO turnover. The Accounting Review, 83 (6), 1487-1519.

Johnson, M. F., Kasznik, R., & Nelson, K. K. (2001). The impact of securities litigation reform on the disclosure of forward■looking information by high technology firms. Journal of Accounting Research, 39 (2), 297-327.

Kim, I., & Skinner, D. J. (2012). Measuring securities litigation risk. Journal of Accounting and Economics, 53 (1-2), 290-310.

Krishnan, J., Rama, D., & Zhang, Y. (2011). Costs to comply with SOX Section 404. Auditing: A Journal of Practice & Theory, 30 (1), 239-266.

Li, C., Sun, L., & Ettredge, M. (2010). Financial executive qualifications, financial executive turnover, and adverse SOX 404 opinions. Journal of Accounting and Economics, 50 (1), 93-110.

Li, H., Pincus, M., & Rego, S. O. (2008). Market reaction to events surrounding the Sarbanes■Oxley Act of 2002. Journal of Law and Economics, 51 (1), 111-134.

Lowry, M., & Shu, S. (2002). Litigation risk and IPO underpricing. Journal of Financial Economics, 65 (3), 309-335.

Nelson, K. K., & Pritchard, A. C. (2016). Carrot or stick? The shift from voluntary to mandatory disclosure of risk factors. Journal of Empirical Legal Studies, 13 (2), 266-297.

Rogers, J. L., & Stocken, P. C. (2005). Credibility of management forecasts. The Accounting Review, 80 (4), 1233-1260.

Rogers, J. L., & Van Buskirk, A. (2009). Shareholder litigation and changes in disclosure behavior. Journal of Accounting and Economics, 47 (1-2), 136-156.

Skinner, D. J. (1994). Why firms voluntarily disclose bad news. Journal of Accounting Research, 32 (1), 38-60.

Zhang, I. X. (2007). Economic consequences of the Sarbanes–Oxley Act of 2002. Journal of Accounting and Economics, 44 (1-2), 74-115., .

Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	22,137	0.5769	0.8215	0.0000	0.0000	1.0986
Treatment Effect	22,137	0.5808	0.4934	0.0000	1.0000	1.0000
Institutional ownership	22,137	0.3778	0.2821	0.1174	0.3421	0.6140
Firm size	22,137	5.2653	2.1337	3.6724	5.1206	6.7038
Book-to-market	22,137	0.7157	0.7261	0.2837	0.5498	0.9385
ROA	22,137	-0.0759	0.2966	-0.0629	0.0134	0.0558
Stock return	22,137	-0.0005	0.6729	-0.4154	-0.1571	0.1924
Earnings volatility	22,137	0.1671	0.3141	0.0241	0.0603	0.1652
Loss	22,137	0.3674	0.4821	0.0000	0.0000	1.0000
Class action litigation risk	22,137	0.4420	0.3442	0.1210	0.3544	0.7752

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

Table 2
Pearson Correlations
CertificationofFinancialStatements 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	**0.12**	**0.10**	**0.05**	**-0.05**	**-0.05**	-0.00	**0.02**	**0.04**	**0.09**
FreqMF	**0.12**	1.00	**0.48**	**0.47**	**-0.15**	**0.21**	-0.01	**-0.12**	**-0.23**	**0.11**
Institutional ownership	**0.10**	**0.48**	1.00	**0.69**	**-0.16**	**0.27**	**-0.11**	**-0.23**	**-0.24**	**0.09**
Firm size	**0.05**	**0.47**	**0.69**	1.00	**-0.38**	**0.30**	0.00	**-0.22**	**-0.32**	**0.11**
Book-to-market	**-0.05**	**-0.15**	**-0.16**	**-0.38**	1.00	**0.09**	**-0.18**	**-0.13**	**0.07**	**-0.12**
ROA	**-0.05**	**0.21**	**0.27**	**0.30**	**0.09**	1.00	**0.12**	**-0.60**	**-0.59**	**-0.27**
Stock return	-0.00	-0.01	**-0.11**	0.00	**-0.18**	**0.12**	1.00	0.01	**-0.09**	**-0.03**
Earnings volatility	**0.02**	**-0.12**	**-0.23**	**-0.22**	**-0.13**	**-0.60**	0.01	1.00	**0.39**	**0.30**
Loss	**0.04**	**-0.23**	**-0.24**	**-0.32**	**0.07**	**-0.59**	**-0.09**	**0.39**	1.00	**0.32**
Class action litigation risk	**0.09**	**0.11**	**0.09**	**0.11**	**-0.12**	**-0.27**	**-0.03**	**0.30**	**0.32**	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 Certification of Financial Statements on Management Forecast Frequency

	(1)	(2)
Treatment Effect	0.1975*** (18.42)	0.1309*** (14.22)
Institutional ownership		0.8107*** (31.48)
Firm size		0.0846*** (22.65)
Book-to-market		0.0042 (0.71)
ROA		0.1287*** (7.15)
Stock return		0.0110 (1.56)
Earnings volatility		0.0804*** (5.01)
Loss		-0.1952*** (16.62)
Class action litigation risk		0.2245*** (15.40)
N	22,137	22,137
R^2	0.0141	0.2874

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