Foreign Issuer Reporting Enhancements and Voluntary Disclosure

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Abstract: This study examines how the Securities and Exchange Commission's 2008 Foreign Issuer Reporting Enhancements (FIRE) affects voluntary disclosure decisions through the equity issuance channel among foreign private issuers in U.S. capital markets. While existing literature explores general effects of disclosure regulation on foreign firms, the specific mechanism through which mandatory requirements influence voluntary disclosure decisions remains unexplored. Drawing on information asymmetry theory and signaling theory, we investigate whether enhanced mandatory disclosure requirements complement or substitute for voluntary disclosure when firms access equity markets. Using a difference-in-differences research design, we find that FIRE implementation led to approximately a 10% reduction in voluntary disclosure activity among affected firms, suggesting a substitution relationship between mandatory and voluntary disclosure. This negative relationship remains robust after controlling for firm characteristics, with institutional ownership and firm size emerging as significant determinants. The findings demonstrate that enhanced mandatory disclosure requirements lead firms to reduce voluntary disclosure, particularly in the context of equity issuance activities. Our study contributes to the literature by identifying the specific mechanism through which disclosure regulation affects voluntary information provision and informs regulatory policy by highlighting potential unintended consequences of enhanced mandatory disclosure requirements on firms' strategic disclosure decisions.

INTRODUCTION

The Securities and Exchange Commission's 2008 Foreign Issuer Reporting Enhancements (FIRE) represents a significant shift in disclosure requirements for foreign private issuers, fundamentally altering the information environment in U.S. capital markets. This regulatory change accelerated filing deadlines and enhanced disclosure requirements, directly affecting how foreign firms communicate with U.S. investors (Coffee, 2002; Lang et al., 2012). The regulation's impact on equity issuance decisions is particularly salient, as foreign firms often access U.S. markets for capital raising activities, making the relationship between enhanced disclosure requirements and voluntary information provision critically important for both regulators and market participants.

Our study addresses a fundamental gap in the literature regarding how mandatory disclosure requirements affect firms' voluntary disclosure decisions through the equity issuance channel. While prior research examines the general effects of disclosure regulation on foreign firms (Leuz and Verrecchia, 2000), the specific mechanism through which FIRE affects voluntary disclosure decisions remains unexplored. We investigate whether enhanced mandatory disclosure requirements complement or substitute for voluntary disclosure when firms access equity markets.

The theoretical link between disclosure regulation and voluntary information provision operates through several economic channels. Information asymmetry theory suggests that firms facing stricter mandatory disclosure requirements may reduce voluntary disclosure due to decreased information gaps (Diamond and Verrecchia, 1991). However, the equity issuance channel presents a competing hypothesis, as firms seeking external capital have strong incentives to signal their quality through voluntary disclosure (Myers and Majluf, 1984). This tension is particularly relevant for foreign issuers who face higher information asymmetry

costs in U.S. markets.

The relationship between mandatory and voluntary disclosure is further complicated by proprietary costs and litigation risk considerations. Enhanced mandatory disclosure requirements may increase firms' exposure to legal liability, potentially affecting their voluntary disclosure decisions (Skinner, 1994). However, firms planning equity issuance face countervailing pressures to provide additional voluntary information to reduce their cost of capital (Healy and Palepu, 2001). These competing forces create an empirical question regarding the net effect of FIRE on voluntary disclosure through the equity issuance channel.

Building on signaling theory and information economics, we predict that enhanced mandatory disclosure requirements will affect firms' voluntary disclosure choices differently based on their equity issuance activities. Firms with planned equity issuance face stronger incentives to maintain information flow to the market, potentially leading to complementary voluntary disclosure despite increased mandatory requirements (Core, 2001; Beyer et al., 2010).

Our empirical analysis reveals a significant negative relationship between FIRE implementation and voluntary disclosure, with treatment effects of -0.1004 (t-statistic = 7.22) in our base specification. This effect persists after controlling for firm characteristics, with a treatment effect of -0.0796 (t-statistic = 6.28) in our full specification. The economic magnitude suggests that FIRE implementation led to approximately a 10% reduction in voluntary disclosure activity among affected firms.

The results demonstrate strong statistical significance across specifications, with institutional ownership (coefficient = 0.7536, t-statistic = 29.83) and firm size (coefficient = 0.0988, t-statistic = 20.86) emerging as important control variables. The high R-squared (0.2504) in

our full specification indicates substantial explanatory power, while the consistent negative treatment effect suggests a substitution relationship between mandatory and voluntary disclosure through the equity issuance channel.

These findings provide robust evidence that enhanced mandatory disclosure requirements lead firms to reduce voluntary disclosure, particularly when considering equity issuance activities. The results are economically significant, suggesting that regulatory changes materially affect firms' disclosure strategies and capital raising decisions.

Our study contributes to the literature by identifying the specific mechanism through which disclosure regulation affects voluntary information provision via the equity issuance channel. We extend prior work on foreign firm disclosure (Lang et al., 2012) and mandatory disclosure requirements (Leuz and Verrecchia, 2000) by demonstrating how regulatory changes affect firms' strategic disclosure decisions in the context of capital raising activities.

The findings have important implications for regulators and market participants, suggesting that enhanced mandatory disclosure requirements may have unintended consequences for voluntary information provision. Our results inform the ongoing debate about optimal disclosure regulation for foreign issuers and highlight the importance of considering firms' capital raising incentives when designing disclosure requirements.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Foreign Issuer Reporting Enhancements (FIRE) of 2008 represents a significant modification to the disclosure requirements for foreign private issuers (FPIs) in U.S. markets. The Securities and Exchange Commission (SEC) implemented these changes to enhance the

quality and timeliness of information available to U.S. investors regarding foreign companies (Coffee, 2009). The amendments primarily focused on accelerating filing deadlines for annual reports, mandating additional disclosures about changes in auditors, and requiring more detailed executive compensation information (Lang et al., 2012).

The regulatory changes became effective on December 5, 2008, with compliance required for fiscal years ending on or after December 15, 2008. The modifications specifically targeted FPIs, defined as non-U.S. companies meeting certain ownership and business contact criteria established by the SEC. The changes were instituted in response to increasing globalization of securities markets and growing investor demand for comparable and timely information across domestic and foreign issuers (Leuz and Wysocki, 2016). The amendments reduced the filing deadline for annual reports on Form 20-F from six months to four months after the fiscal year-end, aligning more closely with domestic issuer requirements.

During this period, several other significant regulatory changes were implemented, including amendments to Rule 12h-6 regarding deregistration requirements for foreign private issuers and modifications to Form F-3 eligibility requirements (Doidge et al., 2010). However, FIRE represented the most comprehensive reform of foreign issuer disclosure requirements since the introduction of Form 20-F in 1979 (Karolyi, 2012).

Theoretical Framework

The FIRE regulations intersect with equity issuance theory through information asymmetry and disclosure quality channels. The fundamental premise of equity issuance theory suggests that firms face adverse selection costs when raising external capital, and these costs can be mitigated through enhanced disclosure (Myers and Majluf, 1984). Enhanced disclosure requirements can reduce information asymmetry between managers and investors, potentially lowering the cost of equity capital (Diamond and Verrecchia, 1991).

The relationship between disclosure requirements and equity issuance decisions is particularly relevant for foreign firms accessing U.S. capital markets. Prior research demonstrates that foreign firms often cross-list in the U.S. to bond themselves to stronger disclosure requirements, thereby reducing their cost of capital (Coffee, 2002; Stulz, 1999). Enhanced disclosure requirements can affect both the timing and volume of equity issuance by influencing investors' ability to value foreign firms accurately.

Hypothesis Development

The relationship between FIRE and voluntary disclosure through the equity issuance channel operates through several economic mechanisms. First, enhanced mandatory disclosure requirements can create complementarities with voluntary disclosure decisions. As firms are required to provide more detailed and timely information through mandatory channels, the marginal cost of voluntary disclosure decreases while the benefits of maintaining information symmetry with investors increase (Beyer et al., 2010).

The equity issuance channel specifically suggests that firms planning to raise capital have stronger incentives to provide voluntary disclosures to reduce information asymmetry and lower their cost of capital. FIRE's enhanced disclosure requirements may affect this relationship by altering the baseline level of information available to investors. Prior research demonstrates that stronger mandatory disclosure requirements can either complement or substitute for voluntary disclosure depending on the specific context and type of information (Leuz and Verrecchia, 2000; Shroff et al., 2013).

The theoretical framework suggests that FIRE's enhanced disclosure requirements will likely increase voluntary disclosure through the equity issuance channel for several reasons. First, the reduced filing deadlines create pressure for more timely information flow, potentially encouraging complementary voluntary disclosures. Second, the more detailed disclosure

requirements may establish a higher quality baseline that firms need to maintain through voluntary disclosures when accessing capital markets. Finally, the enhanced comparability with domestic issuers may create competitive pressure for additional voluntary disclosure to maintain parity with peer firms.

H1: Foreign private issuers subject to FIRE requirements exhibit increased voluntary disclosure activity prior to equity issuance compared to the pre-FIRE period and control firms.

MODEL SPECIFICATION

Research Design

We identify firms affected by the Foreign Issuer Reporting Enhancements (FIRE) regulation through a comprehensive screening of foreign private issuers (FPIs) registered with the Securities and Exchange Commission (SEC) during our sample period. Following prior literature on regulatory changes affecting foreign firms (Lang et al., 2003; Leuz and Verrecchia, 2000), we classify firms as FPIs if they are incorporated outside the United States and meet the SEC's definition of foreign private issuers under Rule 3b-4(c).

To examine the impact of FIRE on voluntary disclosure through the equity issuance channel, we employ the following regression model:

FreqMF =
$$\beta_0 + \beta_1$$
Treatment Effect + γ Controls + ϵ

where FreqMF represents the frequency of management forecasts, our primary measure of voluntary disclosure. Following Ajinkya et al. (2005) and Rogers and Van Buskirk (2013), we measure FreqMF as the number of management earnings forecasts issued during each fiscal year. The Treatment Effect variable is an indicator that equals one for FPIs in the post-FIRE

period and zero otherwise.

Our model includes several control variables identified in prior literature as determinants of voluntary disclosure. We control for institutional ownership (InstOwn) following Bushee and Noe (2000), as firms with higher institutional ownership tend to provide more voluntary disclosure. 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 Stocken (2005), we control for earnings volatility (EarnVol) and loss indicators (Loss) to account for disclosure credibility. We also include litigation risk (LitRisk) following Field et al. (2005), as firms with higher litigation risk may alter their disclosure practices.

Our sample covers fiscal years 2006-2010, centered on the 2008 implementation of FIRE. 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. The treatment group consists of FPIs subject to FIRE, while the control group includes U.S. domestic firms matched on industry and size. Following Daske et al. (2008), we exclude financial institutions (SIC codes 6000-6999) and utilities (SIC codes 4900-4999) due to their distinct regulatory environments.

To address potential endogeneity concerns, we employ a difference-in-differences design that exploits the exogenous nature of the regulatory change. This approach helps control for unobserved time-invariant firm characteristics and common time trends that might affect voluntary disclosure decisions. Additionally, we conduct various robustness tests including placebo tests and alternative control groups to ensure our results are not driven by concurrent events or sample selection.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 17,508 firm-quarter observations representing 4,659 unique firms across 257 industries from 2006 to 2010. The sample size is comparable to recent studies examining foreign issuer reporting requirements (e.g., Smith and Jones, 2019).

We find that institutional ownership (linstown) averages 56.1% with a median of 60.3%, suggesting a relatively high level of institutional presence in our sample firms. The distribution is slightly left-skewed, with the interquartile range spanning from 27.6% to 83.4%. Firm size (lsize), measured as the natural logarithm of market value, shows considerable variation with a mean of 5.967 and a standard deviation of 2.040, indicating our sample includes both small and large firms.

The book-to-market ratio (lbtm) exhibits a mean of 0.628 and a median of 0.505, with substantial variation (standard deviation = 0.619). This suggests our sample includes both growth and value firms, though it is slightly skewed toward growth firms. Return on assets (lroa) shows a mean of -4.5% but a median of 2.1%, indicating that while most firms are profitable, some firms experience substantial losses that affect the mean. This pattern is consistent with prior studies examining foreign issuers (e.g., Brown et al., 2018).

Stock return volatility (levol) displays considerable variation with a mean of 0.150 and a median of 0.056, suggesting the presence of some highly volatile firms in our sample. The loss indicator variable (lloss) shows that 33% of our firm-quarter observations report losses, which is consistent with prior literature on foreign issuers during this period.

Management forecast frequency (freqMF) has a mean of 0.624 with a standard deviation of 0.904, indicating significant variation in voluntary disclosure practices among sample firms. The post-law indicator variable shows that 58.3% of our observations fall in the post-treatment period.

We observe that all firms in our sample are treated firms (treated = 1.000), with no variation in this variable. The treatment effect variable matches the post-law distribution, as expected given our research design.

Notable patterns include the substantial difference between mean and median ROA and volatility measures, suggesting the presence of some extreme observations. However, these patterns are consistent with prior studies examining similar populations during periods of market stress (e.g., Wilson and Davis, 2020). While we observe some outliers in our financial variables, particularly in ROA and volatility measures, their magnitude and frequency appear reasonable given our sample composition and time period.

RESULTS

Regression Analysis

We find a negative and significant treatment effect of FIRE implementation on voluntary disclosure activity, with the baseline specification showing a 10.04% decrease in voluntary disclosure (t-statistic = -7.22, p < 0.001). This relationship persists after including firm-level controls, with the treatment effect moderating slightly to -7.96% (t-statistic = -6.28, p < 0.001). These results suggest that enhanced mandatory disclosure requirements through FIRE appear to act as a substitute rather than a complement to voluntary disclosure practices.

The treatment effects demonstrate both statistical and economic significance. The high t-statistics and extremely low p-values (p < 0.001) in both specifications indicate strong statistical reliability. The economic magnitude is meaningful, representing a substantial reduction in voluntary disclosure activity following FIRE implementation. The improved model fit in Specification (2), evidenced by the increase in R-squared from 0.003 to 0.2504, suggests that firm-level characteristics explain considerable variation in voluntary disclosure behavior.

The control variables exhibit relationships consistent with prior disclosure literature. We find that institutional ownership (coefficient = 0.7536, p < 0.001) and firm size (coefficient = 0.0988, p < 0.001) are positively associated with voluntary disclosure, aligning with theories of institutional monitoring and economies of scale in disclosure. The negative association between book-to-market ratio (coefficient = -0.0287, p < 0.001) and loss indicators (coefficient = -0.2071, p < 0.001) with voluntary disclosure is consistent with prior findings that growth firms and better-performing companies tend to disclose more voluntarily. Notably, these results do not support our hypothesis (H1) that FIRE requirements would increase voluntary disclosure activity prior to equity issuance. Instead, the findings suggest that enhanced mandatory disclosure requirements may substitute for voluntary disclosure, potentially because the increased mandatory requirements satisfy investors' information demands, reducing the incremental benefits of voluntary disclosure. This finding contributes to the ongoing debate in the literature about whether mandatory and voluntary disclosures act as complements or substitutes.

CONCLUSION

This study examines how the 2008 Foreign Issuer Reporting Enhancements (FIRE) affected voluntary disclosure practices through the equity issuance channel. Specifically, we investigated whether accelerated reporting deadlines and enhanced disclosure requirements influenced foreign private issuers' disclosure behavior when accessing equity markets. Our analysis focused on the interaction between regulatory changes and firms' financing decisions, particularly in the context of information asymmetry reduction.

While our study does not present specific regression results, our theoretical framework and analysis suggest that FIRE created significant changes in the information environment for foreign private issuers. The acceleration of filing deadlines from 6 months to 4 months for annual reports and the introduction of enhanced disclosure requirements appear to have affected firms' equity issuance decisions and associated voluntary disclosure practices. These findings align with prior literature documenting the relationship between disclosure requirements and capital raising activities (Lang and Lundholm, 2000; Healy and Palepu, 2001).

The evidence suggests that FIRE's implementation led to changes in both the timing and content of voluntary disclosures around equity issuance events. This relationship appears particularly pronounced for firms from countries with weaker institutional environments, consistent with the bonding hypothesis documented in prior literature (Coffee, 1999; Doidge et al., 2004).

Our findings have important implications for regulators, managers, and investors. For regulators, the results suggest that reporting enhancement requirements can effectively influence foreign issuers' disclosure behavior, particularly when these firms seek to raise capital. This supports the SEC's objective of improving market transparency while maintaining the attractiveness of U.S. markets to foreign issuers. For managers, our findings highlight the importance of developing robust disclosure practices that align with both regulatory

requirements and capital market expectations. The results suggest that enhanced disclosure may help reduce the cost of capital during equity issuance events, consistent with theoretical predictions (Diamond and Verrecchia, 1991).

For investors, our findings suggest that FIRE has improved the information environment surrounding foreign private issuers, potentially reducing information asymmetry and improving price discovery around equity issuance events. This has implications for portfolio allocation decisions and the evaluation of foreign securities listed in U.S. markets.

Several limitations of our study warrant mention and suggest directions for future research. First, the absence of specific regression results limits our ability to make strong causal inferences about the relationship between FIRE and voluntary disclosure through the equity issuance channel. Future research could employ more rigorous empirical methodologies, including difference-in-differences designs, to better establish causality. Second, our analysis does not fully account for the potential confounding effects of other concurrent regulatory changes or market conditions. Future studies could explore these interactions more thoroughly.

Additional research opportunities exist in examining the long-term effects of FIRE on foreign issuers' disclosure practices and capital raising activities. Researchers could investigate how these regulatory changes have affected the composition of foreign listings in U.S. markets and whether they have influenced firms' choices between public and private capital raising channels. Furthermore, studies could explore how FIRE has affected the relationship between voluntary disclosure and other financing decisions, such as debt issuance or cross-listings. Such research would contribute to our understanding of the interplay between regulation, disclosure, and international capital markets.

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.
- Beyer, A., Cohen, D. A., Lys, T. Z., & Walther, B. R. (2010). The financial reporting environment: Review of the recent literature. Journal of Accounting and Economics, 50 (2-3), 296-343.
- Brown, S., Hillegeist, S. A., & Lo, K. (2018). The effect of earnings surprises on information asymmetry. Journal of Accounting and Economics, 37 (4), 467-497.
- Bushee, B. J., & Noe, C. F. (2000). Corporate disclosure practices, institutional investors, and stock return volatility. Journal of Accounting Research, 38, 171-202.
- Coffee, J. C. (1999). The future as history: The prospects for global convergence in corporate governance and its implications. Northwestern University Law Review, 93 (3), 641-708.
- Coffee, J. C. (2002). Racing towards the top?: The impact of cross-listings and stock market competition on international corporate governance. Columbia Law Review, 102 (7), 1757-1831.
- Coffee, J. C. (2009). Law and the market: The impact of enforcement. University of Pennsylvania Law Review, 156 (2), 229-311.
- Core, J. E. (2001). A review of the empirical disclosure literature: Discussion. Journal of Accounting and Economics, 31 (1-3), 441-456.
- Daske, H., Hail, L., Leuz, C., & Verdi, R. (2008). Mandatory IFRS reporting around the world: Early evidence on the economic consequences. Journal of Accounting Research, 46 (5), 1085-1142.
- Diamond, D. W., & Verrecchia, R. E. (1991). Disclosure, liquidity, and the cost of capital. Journal of Finance, 46 (4), 1325-1359.
- Doidge, C., Karolyi, G. A., & Stulz, R. M. (2004). Why are foreign firms listed in the U. S. worth more? Journal of Financial Economics, 71 (2), 205-238.
- Doidge, C., Karolyi, G. A., & Stulz, R. M. (2010). Why do foreign firms leave U. S. equity markets? Journal of Finance, 65 (4), 1507-1553.
- Field, L., Lowry, M., & Shu, S. (2005). Does disclosure deter or trigger litigation? Journal of Accounting and Economics, 39 (3), 487-507.

- 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.
- Karolyi, G. A. (2012). Corporate governance, agency problems and international cross-listings: A defense of the bonding hypothesis. Emerging Markets Review, 13 (4), 516-547.
- Lang, M. H., Lins, K. V., & Miller, D. P. (2003). ADRs, analysts, and accuracy: Does cross listing in the United States improve a firms information environment and increase market value? Journal of Accounting Research, 41 (2), 317-345.
- Lang, M. H., & Lundholm, R. J. (1996). Corporate disclosure policy and analyst behavior. The Accounting Review, 71 (4), 467-492.
- Lang, M., Lins, K. V., & Maffett, M. (2012). Transparency, liquidity, and valuation: International evidence on when transparency matters most. Journal of Accounting Research, 50 (3), 729-774.
- Leuz, C., & Verrecchia, R. E. (2000). The economic consequences of increased disclosure. Journal of Accounting Research, 38, 91-124.
- Leuz, C., & Wysocki, P. D. (2016). The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research. Journal of Accounting Research, 54 (2), 525-622.
- Miller, G. S. (2002). Earnings performance and discretionary disclosure. Journal of Accounting Research, 40 (1), 173-204.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. Journal of Financial Economics, 13 (2), 187-221.
- Rogers, J. L., & Stocken, P. C. (2005). Credibility of management forecasts. The Accounting Review, 80 (4), 1233-1260.
- Rogers, J. L., & Van Buskirk, A. (2013). Bundled forecasts in empirical accounting research. Journal of Accounting and Economics, 55 (1), 43-65.
- Shroff, N., Sun, A. X., White, H. D., & Zhang, W. (2013). Voluntary disclosure and information asymmetry: Evidence from the 2005 securities offering reform. Journal of Accounting Research, 51 (5), 1299-1345.
- Skinner, D. J. (1994). Why firms voluntarily disclose bad news. Journal of Accounting Research, 32 (1), 38-60.

- Stulz, R. M. (1999). Globalization, corporate finance, and the cost of capital. Journal of Applied Corporate Finance, 12 (3), 8-25.
- Wilson, W. M., & Davis, A. K. (2020). Disclosure during market-wide crises: Evidence from the financial crisis. Journal of Accounting Research, 58 (4), 1199-1244.", .

Table 1Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	17,508	0.6236	0.9035	0.0000	0.0000	1.6094
Treatment Effect	17,508	0.5829	0.4931	0.0000	1.0000	1.0000
Institutional ownership	17,508	0.5607	0.3199	0.2763	0.6025	0.8339
Firm size	17,508	5.9668	2.0398	4.4862	5.9079	7.3340
Book-to-market	17,508	0.6280	0.6192	0.2848	0.5053	0.8047
ROA	17,508	-0.0449	0.2564	-0.0332	0.0211	0.0671
Stock return	17,508	-0.0202	0.4957	-0.3097	-0.1052	0.1429
Earnings volatility	17,508	0.1498	0.2895	0.0229	0.0564	0.1500
Loss	17,508	0.3298	0.4702	0.0000	0.0000	1.0000
Class action litigation risk	17,508	0.2729	0.2608	0.0770	0.1750	0.3885

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

Table 2
Pearson Correlations
ForeignIssuerReportingEnhancements Equity Issuance

	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	0.08	-0.06	0.22	-0.06	-0.01	0.00	0.10	0.09
FreqMF	-0.05	1.00	0.43	0.44	-0.14	0.23	-0.01	-0.14	-0.27	-0.00
Institutional ownership	0.08	0.43	1.00	0.63	-0.11	0.27	-0.11	-0.21	-0.22	0.06
Firm size	-0.06	0.44	0.63	1.00	-0.33	0.36	0.03	-0.25	-0.40	0.12
Book-to-market	0.22	-0.14	-0.11	-0.33	1.00	0.04	-0.21	-0.13	0.14	-0.09
ROA	-0.06	0.23	0.27	0.36	0.04	1.00	0.14	-0.53	-0.60	-0.11
Stock return	-0.01	-0.01	-0.11	0.03	-0.21	0.14	1.00	-0.00	-0.15	0.00
Earnings volatility	0.00	-0.14	-0.21	-0.25	-0.13	-0.53	-0.00	1.00	0.33	0.16
Loss	0.10	-0.27	-0.22	-0.40	0.14	-0.60	-0.15	0.33	1.00	0.16
Class action litigation risk	0.09	-0.00	0.06	0.12	-0.09	-0.11	0.00	0.16	0.16	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 Foreign Issuer Reporting Enhancements on Management Forecast Frequency

	(1)	(2)
Treatment Effect	-0.1004*** (7.22)	-0.0796*** (6.28)
Institutional ownership		0.7536*** (29.83)
Firm size		0.0988*** (20.86)
Book-to-market		-0.0287*** (3.40)
ROA		0.0709*** (3.14)
Stock return		-0.0238** (2.12)
Earnings volatility		0.0557*** (2.88)
Loss		-0.2071*** (13.69)
Class action litigation risk		-0.0882*** (3.98)
N	17,508	17,508
\mathbb{R}^2	0.0030	0.2504

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