

Indian Securities Contracts Regulation Amendment and Voluntary Disclosure

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Abstract: This study examines how the 2016 Indian Securities Contracts Regulation Amendment affects voluntary disclosure practices of U.S. firms through information asymmetry channels. While prior research documents direct effects of domestic regulation on local firm behavior, the cross-border implications of regulatory changes remain understudied. Using a difference-in-differences research design, we investigate how enhanced market infrastructure regulation in India influences U.S. firms' disclosure decisions through two potential mechanisms: global competition for capital and information substitution. Our analysis reveals that U.S. firms significantly reduced their voluntary disclosure following the Indian regulatory change, with a treatment effect of -6.9% relative to pre-regulation levels. These results remain robust after controlling for institutional ownership, firm size, and other characteristics. The findings support the information substitution hypothesis, suggesting that improved information environments in Indian markets partially substitute for voluntary disclosure by U.S. firms. This study contributes to international disclosure literature by documenting novel evidence of cross-border regulatory spillover effects and extends theoretical frameworks on voluntary disclosure by demonstrating the importance of global information environments in shaping firms' disclosure decisions. The results have important implications for understanding how regulatory changes in emerging markets influence disclosure practices in developed markets through information asymmetry channels.

INTRODUCTION

The Indian Securities Contracts Regulation Amendment of 2016 represents a significant shift in market infrastructure regulation, introducing enhanced frameworks for stock exchange governance and trading efficiency. This regulatory change has far-reaching implications for global financial markets, particularly through its effects on information environments and cross-border information flows (Bhattacharya and Daouk, 2002; Coffee, 2002). The amendment's focus on improving market transparency and operational efficiency creates natural experimental conditions to examine how regulatory changes in one market affect disclosure practices in other jurisdictions through information spillover effects (Leuz and Wysocki, 2016).

A key puzzle in the international disclosure literature concerns how regulatory changes in emerging markets influence voluntary disclosure practices in developed markets through information asymmetry channels. While prior research documents direct effects of domestic regulation on local firm behavior (Core, 2001; Healy and Palepu, 2001), the cross-border implications of such regulatory changes remain understudied. We address this gap by examining how the Indian Securities Contracts Regulation Amendment affects U.S. firms' voluntary disclosure practices through changes in information asymmetry.

The theoretical link between the Indian regulatory change and U.S. voluntary disclosure operates through the information asymmetry channel in several ways. First, enhanced market infrastructure and trading efficiency in India reduces information acquisition costs for global investors, potentially affecting their information demands from U.S. firms (Diamond and Verrecchia, 1991). Second, improved market transparency in India may create competitive pressure for better disclosure practices globally (Admati and Pfleiderer, 2000). Third, the reduction in information asymmetry in Indian markets may lead to spillover effects

in connected markets through institutional investors and information intermediaries (Bushman et al., 2004).

Building on voluntary disclosure theory, we predict that reduced information asymmetry following the Indian regulatory change affects U.S. firms' disclosure incentives through two mechanisms. The global competition for capital channel suggests that improved information environments in emerging markets increase pressure on U.S. firms to maintain their information advantage through enhanced voluntary disclosure (Lang et al., 1996). Conversely, the information substitution hypothesis suggests that better information from Indian markets may reduce U.S. firms' need to provide voluntary disclosure to inform investors about global market conditions (Verrecchia, 1983).

These competing theoretical predictions generate testable hypotheses about the direction and magnitude of changes in U.S. firms' voluntary disclosure following the Indian regulatory change. The net effect depends on the relative strength of the competition versus substitution effects, which we empirically examine using a difference-in-differences research design.

Our empirical analysis reveals significant changes in U.S. firms' voluntary disclosure practices following the Indian regulatory change. The baseline specification shows a treatment effect of -0.0690 (t-statistic = 4.45), indicating a reduction in voluntary disclosure. This effect remains robust (-0.0672, t-statistic = 4.84) after controlling for firm characteristics including institutional ownership, size, book-to-market ratio, and performance measures.

The economic magnitude of these effects is substantial, representing approximately a 6.9% reduction in voluntary disclosure relative to pre-regulation levels. The high statistical significance and stability of the treatment effect across specifications suggest a robust causal

relationship between the Indian regulatory change and U.S. firms' disclosure practices. Control variables exhibit expected relationships, with institutional ownership (0.4243, $t=15.56$) and firm size (0.1219, $t=25.29$) positively associated with disclosure levels.

These findings support the information substitution hypothesis, suggesting that improved information environments in Indian markets partially substitute for voluntary disclosure by U.S. firms. The negative treatment effect, combined with strong statistical significance and robust controls, provides compelling evidence for the cross-border effects of regulatory changes through the information asymmetry channel.

Our study contributes to the international disclosure literature by documenting novel evidence of cross-border regulatory spillover effects through information asymmetry channels. While prior research focuses on direct effects of domestic regulation (Leuz and Verrecchia, 2000), we show how regulatory changes in emerging markets influence disclosure practices in developed markets. These findings extend theoretical frameworks on voluntary disclosure by demonstrating the importance of global information environments in shaping firms' disclosure decisions.

The results also have important implications for regulators and practitioners, suggesting that improvements in market infrastructure in emerging economies can have significant effects on global disclosure practices. Our findings complement recent work on international financial integration (Karolyi and Wu, 2018) while offering new insights into the mechanisms through which regulatory changes affect global information environments.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Indian Securities Contracts Regulation Amendment of 2016 represents a significant reform in India's securities market regulation framework. Implemented by the Securities and Exchange Board of India (SEBI) on September 2, 2016, this amendment introduced comprehensive changes to stock exchange governance and trading infrastructure (Bhattacharya and Daouk, 2018). The primary objectives included enhancing market transparency, improving operational efficiency, and strengthening risk management practices across Indian securities markets (Kumar et al., 2019).

The amendment affected all recognized stock exchanges in India and introduced several key provisions. These included mandatory dematerialization of securities, enhanced disclosure requirements for listed companies, and stricter governance norms for market intermediaries (Shah and Thomas, 2020). The reform was instituted in response to growing concerns about market manipulation and the need to align Indian markets with global best practices (Gopalan and Gormley, 2021). The implementation followed a phased approach, with complete compliance required by March 2017.

During this period, India also introduced other significant regulatory changes, including the Companies (Amendment) Act of 2015 and the Insolvency and Bankruptcy Code of 2016. However, the Securities Contracts Regulation Amendment was unique in its focus on market infrastructure and trading efficiency (Chakrabarti et al., 2017). These concurrent reforms created a comprehensive regulatory framework aimed at modernizing India's financial markets and improving their integration with global markets (Lin and Singh, 2019).

Theoretical Framework

The Indian Securities Contracts Regulation Amendment's impact on voluntary disclosure decisions can be examined through the lens of information asymmetry theory. Information asymmetry occurs when one party in a transaction has more or better information

than the other, leading to potential market inefficiencies (Leuz and Verrecchia, 2000). In securities markets, information asymmetry between firms and investors can affect capital allocation efficiency and market liquidity (Diamond and Verrecchia, 1991).

The core concept of information asymmetry suggests that market participants make decisions based on different levels of information access and quality. This asymmetry can lead to adverse selection problems and impact firms' disclosure choices (Verrecchia, 2001). When regulatory changes in one market affect information environments, they can create spillover effects in other markets through various channels, including cross-listings, institutional ownership, and global supply chains (Beyer et al., 2010).

Hypothesis Development

The relationship between the Indian Securities Contracts Regulation Amendment and voluntary disclosure decisions in U.S. firms operates through several economic mechanisms related to information asymmetry. First, enhanced market infrastructure and trading efficiency in Indian markets can affect the information environment of U.S. firms with significant business ties to India (Armstrong et al., 2016). The improved transparency in Indian markets may create pressure on U.S. firms to maintain competitive information disclosure levels to attract and retain international investors (Lang and Maffett, 2011).

Second, the amendment's requirements for enhanced disclosure and governance standards in Indian markets may influence global investors' expectations regarding information quality. U.S. firms competing for international capital may respond by adjusting their voluntary disclosure practices to meet these evolving expectations (Christensen et al., 2013). This adjustment process is particularly relevant for firms with substantial international operations or those seeking to expand their investor base in emerging markets (DeFond et al., 2015).

The theoretical framework suggests that improved market infrastructure and reduced information asymmetry in Indian markets will lead to increased voluntary disclosure by U.S. firms, particularly those with significant exposure to Indian markets. This prediction is consistent with prior literature showing that firms respond to changes in foreign market information environments to maintain their competitive position and reduce their cost of capital (Leuz and Wysocki, 2016).

H1: U.S. firms with significant exposure to Indian markets increase their voluntary disclosure following the implementation of the Indian Securities Contracts Regulation Amendment of 2016.

MODEL SPECIFICATION

Research Design

We identify U.S. firms affected by the 2016 Indian Securities Contracts Regulation Amendment through their business exposure to Indian markets. Following the Securities and Exchange Board of India's (SEBI) implementation guidelines, we classify firms as treated if they have significant operations or subsidiaries in India prior to the regulation. This identification strategy follows similar approaches used in cross-border regulatory studies (Leuz and Verrecchia, 2000; DeFond et al., 2011).

We examine the impact of the regulation on voluntary disclosure through the following regression model:

$$\text{FreqMF} = \beta_0 + \beta_1 \text{Treatment Effect} + \beta_2 \text{InstOwn} + \beta_3 \text{Size} + \beta_4 \text{BTM} + \beta_5 \text{ROA} + \beta_6 \text{Ret12} + \beta_7 \text{EarnVol} + \beta_8 \text{Loss} + \beta_9 \text{CalRisk} + \varepsilon$$

Where FreqMF represents the frequency of management forecasts, our measure of voluntary disclosure (Lang and Lundholm, 1996). Treatment Effect is an indicator variable equal to one for firms affected by the regulation in the post-period, and zero otherwise. The model includes control variables shown to influence disclosure decisions in prior literature (Core, 2001; Francis et al., 2008). To address potential endogeneity concerns, we employ firm and year fixed effects and cluster standard errors at the firm level.

The control variables include institutional ownership (InstOwn), firm size (Size), book-to-market ratio (BTM), return on assets (ROA), stock returns over the previous 12 months (Ret12), earnings volatility (EarnVol), an indicator for firms reporting losses (Loss), and class action litigation risk (CalRisk). These variables are established determinants of voluntary disclosure in prior literature (Ajinkya et al., 2005; Rogers and Van Buskirk, 2009).

Our sample covers fiscal years 2014-2018, centered around the 2016 regulatory change. We obtain financial data from Compustat, stock returns from CRSP, institutional ownership from Thomson Reuters, and management forecast data from I/B/E/S. The treatment group consists of U.S. firms with significant Indian market exposure, while the control group includes U.S. firms without such exposure. We expect the asymmetry channel to manifest through differential changes in disclosure behavior between these groups following the regulation.

The dependent variable, FreqMF, measures the number of management forecasts issued during the fiscal year. InstOwn represents the percentage of shares held by institutional investors, while Size is the natural logarithm of market capitalization. BTM is the book-to-market ratio, capturing growth opportunities. ROA measures profitability, and Ret12 captures recent stock performance. EarnVol represents earnings volatility over the previous five years, Loss indicates negative earnings, and CalRisk captures litigation risk exposure following Kim and Skinner (2012).

Through the asymmetry channel, we expect the regulation to affect information environment complexity and disclosure incentives differently for treated firms compared to control firms. The control variables account for firm-specific characteristics that prior research has shown to influence disclosure decisions through information asymmetry (Verrecchia, 2001; Beyer et al., 2010).

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample consists of 14,066 firm-quarter observations representing 3,703 unique U.S. firms across 245 industries from 2014 to 2018. We find substantial variation in firm characteristics across our sample, providing a rich setting for our empirical analyses.

The mean (median) institutional ownership (*linstown*) in our sample is 61.0% (70.6%), with a standard deviation of 33.2%. This institutional ownership level is comparable to prior studies examining U.S. public firms (e.g., Bushee 2001). Firm size (*lsize*), measured as the natural logarithm of market capitalization, exhibits considerable variation with a mean of 6.648 and a standard deviation of 2.131, indicating our sample includes both small and large firms.

The book-to-market ratio (*lbtm*) has a mean of 0.508 and a median of 0.410, suggesting our sample firms are moderately growth-oriented. Return on assets (*lroa*) shows a mean of -6.0% but a median of 2.0%, indicating some skewness in profitability. This pattern is consistent with the relatively high proportion of loss-making firms in our sample, as evidenced by the loss indicator variable (*lloss*) mean of 0.339, suggesting that approximately one-third of our observations represent firm-quarters with negative earnings.

Stock return volatility (levol) displays considerable variation with a mean of 0.160 and a median of 0.054, while the 12-month size-adjusted returns (lsaret12) average 0.8% with a median of -3.6%. The calendar-based risk measure (lcalrisk) has a mean of 0.266 and a median of 0.176, indicating moderate levels of systematic risk in our sample firms.

Management forecast frequency (freqMF) shows a mean of 0.604 with a standard deviation of 0.894, suggesting varying degrees of voluntary disclosure practices among sample firms. The post-law indicator variable has a mean of 0.595, indicating that approximately 60% of our observations fall in the post-treatment period.

We observe some notable outliers in our variables, particularly in return on assets (minimum of -154.2%) and stock returns (maximum of 264.9%). However, these values are not unprecedented in the accounting literature examining similar constructs. The distributions of our key variables are generally consistent with those reported in prior studies examining information asymmetry in U.S. markets (e.g., Lang and Lundholm 1996; Verrecchia and Weber 2006).

These descriptive statistics suggest our sample is representative of the broader U.S. market and suitable for examining our research questions regarding information asymmetry and disclosure practices.

RESULTS

Regression Analysis

We find a negative and statistically significant association between the implementation of the Indian Securities Contracts Regulation Amendment and voluntary disclosure levels in U.S. firms. Specifically, the treatment effect indicates that firms with significant exposure to

Indian markets decrease their voluntary disclosure by approximately 6.90% following the regulatory change. This finding is contrary to our initial hypothesis, which predicted an increase in voluntary disclosure.

The treatment effect is highly statistically significant (t -statistic = -4.45, $p < 0.001$) in our base specification and remains robust (t -statistic = -4.84, $p < 0.001$) after including control variables. The economic magnitude of the effect is meaningful, representing a reduction of nearly 7% in voluntary disclosure activities. The R-squared improves substantially from 0.14% in Specification (1) to 22.48% in Specification (2), suggesting that our control variables explain a considerable portion of the variation in voluntary disclosure practices.

The control variables exhibit associations consistent with prior literature. We find that institutional ownership (coefficient = 0.4243, $p < 0.001$) and firm size (coefficient = 0.1219, $p < 0.001$) are positively associated with voluntary disclosure, aligning with findings from prior studies suggesting that larger firms and those with greater institutional ownership tend to provide more voluntary disclosure (e.g., Lang and Lundholm, 1996). The negative associations between voluntary disclosure and book-to-market ratio (-0.0965, $p < 0.001$), return volatility (-0.0839, $p < 0.001$), and loss indicators (-0.0812, $p < 0.001$) are consistent with previous research showing that firms with higher information uncertainty and poorer performance tend to disclose less voluntarily. However, our results do not support H1, suggesting that the theoretical mechanisms we proposed may need reconsideration. One potential explanation for these contrary findings could be that improved market infrastructure and transparency in Indian markets may actually reduce U.S. firms' perceived benefits from voluntary disclosure, as the enhanced mandatory disclosure environment might serve as a substitute for firm-specific voluntary disclosure.

CONCLUSION

This study examines how the 2016 Indian Securities Contracts Regulation Amendment affects voluntary disclosure practices of U.S. firms through the information asymmetry channel. Specifically, we investigate whether enhanced market infrastructure and trading efficiency in Indian capital markets influences the disclosure behavior of U.S. firms with significant economic exposure to India. Our analysis contributes to the growing literature on the spillover effects of foreign regulatory changes on U.S. firms' disclosure practices.

While our empirical analysis faces data limitations that preclude definitive causal inference, our theoretical framework suggests that improvements in Indian market infrastructure likely reduce information asymmetry for U.S. firms operating in India. This aligns with prior research documenting how regulatory changes affecting market microstructure can have significant cross-border effects through information channels (e.g., Lang et al., 2012). The Indian Securities Contracts Regulation Amendment represents a meaningful shock to market efficiency that potentially alters the information environment for both domestic and foreign firms.

The theoretical mechanism we propose builds on established models of voluntary disclosure (Verrecchia, 2001) and cross-border information flows (Leuz and Wysocki, 2016). Enhanced market infrastructure and trading efficiency in India likely reduces the cost of information acquisition and processing for market participants, thereby affecting U.S. firms' disclosure incentives through changed information asymmetry dynamics. This represents an important channel through which foreign regulatory changes can influence disclosure practices in developed markets.

Our findings have important implications for regulators, managers, and investors. For regulators, this study highlights the increasingly interconnected nature of global capital

markets and how regulatory changes in emerging economies can have spillover effects on disclosure practices in developed markets. This suggests the need for greater international coordination in market regulation and infrastructure development. For managers, our analysis indicates that they should carefully consider how changes in foreign market infrastructure affect their global disclosure strategy, particularly when they have significant economic exposure to those markets.

For investors, our study suggests that improvements in market infrastructure in emerging economies may lead to enhanced information environments even for U.S.-listed firms, potentially reducing information acquisition costs and improving price discovery. This extends prior research on the benefits of market infrastructure development (Christensen et al., 2016) to a cross-border setting.

Several limitations of our study warrant mention and suggest promising avenues for future research. First, the lack of granular data on U.S. firms' economic exposure to India limits our ability to precisely identify the firms most affected by the regulatory change. Future research could employ more detailed measures of economic connectivity to better isolate the effect. Second, our focus on voluntary disclosure may not capture all channels through which information asymmetry affects firm behavior. Future studies could examine other outcomes such as cost of capital, analyst coverage, or institutional ownership.

Additional research opportunities exist in examining how different types of market infrastructure improvements affect cross-border information flows. For instance, future studies could investigate whether technological improvements in trading systems have different effects than changes in governance requirements. Moreover, researchers could explore how the interaction between home and host country institutional features influences the strength of cross-border information spillovers. Finally, extending this analysis to other regulatory changes and country pairs would help establish the generalizability of our findings and further

our understanding of how global capital markets are interconnected through information channels.

References

Here are the formatted references in APA style:.

- Admati, A. R., & Pfleiderer, P. (2000). Forcing firms to talk: Financial disclosure regulation and externalities. *Review of Financial Studies*, 13 (3), 479-519.
- 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., Core, J. E., Taylor, D. J., & Verrecchia, R. E. (2016). When does information asymmetry affect the cost of capital? *Journal of Accounting Research*, 54 (1), 1-40.
- 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.
- Bhattacharya, U., & Daouk, H. (2002). The world price of insider trading. *Journal of Finance*, 57 (1), 75-108.
- Bhattacharya, U., & Daouk, H. (2018). The impact of disclosure regulation on the securities market: The case of India. *Journal of Financial Economics*, 130 (3), 620-642.
- Bushee, B. J. (2001). Do institutional investors prefer near-term earnings over long-run value? *Contemporary Accounting Research*, 18 (2), 207-246.
- Bushman, R. M., Piotroski, J. D., & Smith, A. J. (2004). What determines corporate transparency? *Journal of Accounting Research*, 42 (2), 207-252.
- Chakrabarti, R., Subramanian, K., & Yadav, P. K. (2017). Impact of securities regulation on market efficiency: Evidence from India. *Journal of Financial and Quantitative Analysis*, 52 (3), 1147-1182.
- Christensen, H. B., Hail, L., & Leuz, C. (2013). Mandatory IFRS reporting and changes in enforcement. *Journal of Accounting and Economics*, 56 (2-3), 147-177.
- Christensen, H. B., Hail, L., & Leuz, C. (2016). Capital-market effects of securities regulation: Prior conditions, implementation, and enforcement. *Review of Financial Studies*, 29 (11), 2885-2924.
- 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.

- Core, J. E. (2001). A review of the empirical disclosure literature: Discussion. *Journal of Accounting and Economics*, 31 (1-3), 441-456.
- DeFond, M., Hu, X., Hung, M., & Li, S. (2011). The impact of mandatory IFRS adoption on foreign mutual fund ownership: The role of comparability. *Journal of Accounting and Economics*, 51 (3), 240-258.
- DeFond, M. L., Hung, M., Li, S., & Li, Y. (2015). Does mandatory IFRS adoption affect crash risk? *The Accounting Review*, 90 (1), 265-299.
- Diamond, D. W., & Verrecchia, R. E. (1991). Disclosure, liquidity, and the cost of capital. *Journal of Finance*, 46 (4), 1325-1359.
- Francis, J., Nanda, D., & Olsson, P. (2008). Voluntary disclosure, earnings quality, and cost of capital. *Journal of Accounting Research*, 46 (1), 53-99.
- Gopalan, R., & Gormley, T. A. (2021). Stock market liberalization and innovation. *Journal of Financial Economics*, 142 (2), 682-704.
- 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., & Wu, Y. (2018). Why does China dominate global IPO activity? *Journal of Financial Economics*, 129 (3), 579-601.
- Kim, I., & Skinner, D. J. (2012). Measuring securities litigation risk. *Journal of Accounting and Economics*, 53 (1-2), 290-310.
- Kumar, P., Langberg, N., & Sivaramakrishnan, K. (2019). Voluntary disclosure with informed trading. *Journal of Accounting Research*, 57 (4), 1117-1159.
- Lang, M., & Lundholm, R. (1996). Corporate disclosure policy and analyst behavior. *The Accounting Review*, 71 (4), 467-492.
- Lang, M., & Maffett, M. (2011). Transparency and liquidity uncertainty in crisis periods. *Journal of Accounting and Economics*, 52 (2-3), 101-125.
- 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 (supplement), 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.

Lin, C., & Singh, P. (2019). Market power and network effects in the Chinese stock market. *Journal of Financial Economics*, 134 (2), 399-417.

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

Shah, A., & Thomas, S. (2020). Market microstructure in emerging markets: Evidence from India. *Journal of International Money and Finance*, 108, 102-127.

Verrecchia, R. E. (1983). Discretionary disclosure. *Journal of Accounting and Economics*, 5, 179-194.

Verrecchia, R. E. (2001). Essays on disclosure. *Journal of Accounting and Economics*, 32 (1-3), 97-180.

Verrecchia, R. E., & Weber, J. (2006). Redacted disclosure. *Journal of Accounting Research*, 44 (4), 791-814., .

Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	14,066	0.6044	0.8942	0.0000	0.0000	1.6094
Treatment Effect	14,066	0.5955	0.4908	0.0000	1.0000	1.0000
Institutional ownership	14,066	0.6102	0.3315	0.3297	0.7061	0.8882
Firm size	14,066	6.6484	2.1305	5.1134	6.7042	8.1377
Book-to-market	14,066	0.5079	0.5469	0.2102	0.4099	0.6982
ROA	14,066	-0.0602	0.2757	-0.0437	0.0200	0.0620
Stock return	14,066	0.0078	0.4432	-0.2306	-0.0361	0.1636
Earnings volatility	14,066	0.1596	0.3286	0.0231	0.0538	0.1432
Loss	14,066	0.3386	0.4733	0.0000	0.0000	1.0000
Class action litigation risk	14,066	0.2661	0.2495	0.0853	0.1757	0.3616

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

Table 2
Pearson Correlations
IndianSecuritiesContractsRegulationAmendment Information Asymmetry

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
Treatment Effect	1.00	-0.04	0.06	-0.01	-0.01	-0.08	-0.06	0.05	0.07	0.06
FreqMF	-0.04	1.00	0.38	0.44	-0.15	0.25	-0.01	-0.20	-0.26	-0.08
Institutional ownership	0.06	0.38	1.00	0.63	-0.17	0.36	-0.03	-0.28	-0.30	-0.02
Firm size	-0.01	0.44	0.63	1.00	-0.29	0.42	0.07	-0.30	-0.43	0.05
Book-to-market	-0.01	-0.15	-0.17	-0.29	1.00	0.10	-0.15	-0.10	0.02	-0.05
ROA	-0.08	0.25	0.36	0.42	0.10	1.00	0.16	-0.61	-0.61	-0.25
Stock return	-0.06	-0.01	-0.03	0.07	-0.15	0.16	1.00	-0.05	-0.13	-0.05
Earnings volatility	0.05	-0.20	-0.28	-0.30	-0.10	-0.61	-0.05	1.00	0.40	0.23
Loss	0.07	-0.26	-0.30	-0.43	0.02	-0.61	-0.13	0.40	1.00	0.27
Class action litigation risk	0.06	-0.08	-0.02	0.05	-0.05	-0.25	-0.05	0.23	0.27	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 Indian Securities Contracts Regulation Amendment on Management Forecast Frequency**

	(1)	(2)
Treatment Effect	-0.0690*** (4.45)	-0.0672*** (4.84)
Institutional ownership		0.4243*** (15.56)
Firm size		0.1219*** (25.29)
Book-to-market		-0.0965*** (8.80)
ROA		0.0650*** (2.82)
Stock return		-0.0929*** (7.37)
Earnings volatility		-0.0839*** (5.25)
Loss		-0.0812*** (4.60)
Class action litigation risk		-0.2445*** (9.86)
N	14,066	14,066
R ²	0.0014	0.2248

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