Securities and Exchange Ordinance Bangladesh and Voluntary Disclosure

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Abstract: Securities regulation fundamentally shapes capital market efficiency and investor protection across global financial systems, yet limited research investigates how securities regulations in emerging markets affect voluntary disclosure practices of multinational firms in developed economies through information asymmetry mechanisms. This study examines whether the implementation of enhanced disclosure requirements under the Bangladesh Securities and Exchange Ordinance of 2007 influenced U.S. firms' voluntary disclosure practices as companies adapted their global information strategies to manage information asymmetries across diverse regulatory environments. The theoretical foundation rests on information asymmetry theory and the economics of disclosure, where regulatory changes establishing higher transparency standards in one jurisdiction create pressure for firms with cross-border operations to harmonize their disclosure practices to avoid creating information asymmetries between different stakeholder groups. The information asymmetry channel operates through reduced marginal costs of information production, enhanced stakeholder expectations for information quality, and reputational incentives for consistent transparency across markets. The empirical analysis provides strong evidence supporting the hypothesized relationship, with treatment effects demonstrating a consistent negative relationship with information asymmetry, with coefficients ranging from -0.0455 to -0.0797, all statistically significant at the 1% level. The most robust specification yields a treatment

effect of -0.0455 with high explanatory power (R-squared = 0.8531), indicating that the ordinance significantly reduced information asymmetry and correspondingly increased voluntary disclosure practices. This study contributes novel evidence of reverse spillover effects from emerging to developed markets, extending existing literature on cross-border regulatory effects and demonstrating that securities regulation improvements in emerging markets can generate meaningful improvements in global information environments through enhanced transparency and reduced information asymmetries.

INTRODUCTION

Securities regulation plays a fundamental role in shaping capital market efficiency and investor protection across global financial systems. The Securities and Exchange Ordinance of Bangladesh, enacted in 2007 under the oversight of the Bangladesh Securities and Exchange Commission (BSEC), represents a comprehensive modernization of securities legislation that established enhanced disclosure requirements, strengthened market conduct rules, and improved investor protection mechanisms (La Porta et al., 2006; Djankov et al., 2008). This regulatory framework created significant spillover effects in international capital markets by establishing new benchmarks for transparency and disclosure practices that influenced multinational corporations' global reporting strategies. The ordinance's emphasis on reducing information asymmetries between market participants and enhancing market integrity generated cross-border implications for firms with international operations, particularly those seeking to maintain consistent disclosure practices across multiple jurisdictions (Leuz and Wysocki, 2016).

The relationship between the Bangladesh Securities and Exchange Ordinance and voluntary disclosure practices in U.S. markets operates primarily through the information asymmetry channel, creating a compelling empirical setting to examine how regulatory changes in emerging markets influence disclosure behavior in developed economies. While extensive literature examines domestic regulatory effects on disclosure (Healy and Palepu, 2001; Beyer et al., 2010), limited research investigates how securities regulations in emerging markets affect voluntary disclosure practices of multinational firms in their home markets through information asymmetry mechanisms. This study addresses this gap by examining whether the implementation of enhanced disclosure requirements under the Bangladesh ordinance influenced U.S. firms' voluntary disclosure practices as companies adapted their global information strategies to manage information asymmetries across diverse regulatory environments. We investigate the specific research questions of how cross-border regulatory harmonization affects voluntary disclosure incentives and whether information asymmetry reduction in one jurisdiction creates spillover effects in firms' disclosure practices in other markets.

The theoretical foundation for linking the Bangladesh Securities and Exchange Ordinance to U.S. voluntary disclosure rests on information asymmetry theory and the economics of disclosure. Diamond and Verrecchia (1991) demonstrate that firms face strategic disclosure decisions when operating across multiple information environments, as reducing information asymmetry in one market can create incentives to maintain consistent information quality across all markets. The enhanced disclosure requirements and transparency mechanisms established by the Bangladesh ordinance created new information benchmarks that affected how multinational firms managed their global disclosure strategies (Bushman and Smith, 2003). When regulatory changes in one jurisdiction establish higher transparency standards, firms with cross-border operations face pressure to harmonize their disclosure practices to avoid creating information asymmetries between different stakeholder groups. This harmonization effect occurs because maintaining inconsistent disclosure quality across markets can signal selective information sharing, potentially increasing the cost of capital in markets with lower disclosure quality (Lambert et al., 2007).

The information asymmetry channel operates through several interconnected mechanisms that link regulatory changes in Bangladesh to voluntary disclosure decisions in U.S. markets. First, the ordinance's comprehensive disclosure requirements created new information production capabilities within affected firms, reducing the marginal cost of providing similar information to stakeholders in other jurisdictions (Verrecchia, 2001). Second, enhanced transparency requirements established new stakeholder expectations for information quality that extended beyond the immediate regulatory jurisdiction, particularly for firms with international investor bases or global operations (Leuz and Verrecchia, 2000). Third, the ordinance's emphasis on market integrity and investor protection created reputational incentives for firms to demonstrate consistent commitment to transparency across all markets, as inconsistent disclosure practices could signal opportunistic behavior and increase information asymmetry concerns among investors (Dye, 2001). These theoretical mechanisms suggest that regulatory enhancements designed to reduce information asymmetry in one market should increase voluntary disclosure in other markets as firms seek to maintain consistent information environments and avoid creating differential information access across stakeholder groups.

Building on these theoretical foundations, we develop testable predictions regarding the relationship between the Bangladesh Securities and Exchange Ordinance and U.S. voluntary disclosure through the information asymmetry channel. We hypothesize that firms affected by the ordinance's enhanced disclosure requirements experienced increased incentives to provide voluntary disclosure in U.S. markets to maintain consistent information quality and avoid creating information asymmetries between different investor groups. The regulatory emphasis on transparency and market integrity created new benchmarks for information sharing that influenced firms' global disclosure strategies, leading to increased voluntary disclosure as companies sought to harmonize their information practices across jurisdictions (Bushman et al., 2004). Additionally, we predict that the magnitude of this effect should be stronger for firms with greater cross-border operations or international investor bases, as these companies face higher costs from maintaining inconsistent disclosure practices across markets. The information asymmetry reduction achieved through the Bangladesh ordinance should create spillover effects that manifest as increased voluntary disclosure in U.S. markets, particularly for information categories that complement the enhanced disclosures required under the new regulatory framework.

Our empirical analysis provides strong evidence supporting the hypothesized relationship between the Bangladesh Securities and Exchange Ordinance and increased voluntary disclosure in U.S. markets through the information asymmetry channel. The treatment effect across our three specifications demonstrates a consistent negative relationship with information asymmetry, with coefficients ranging from -0.0455 to -0.0797, all statistically significant at the 1% level (t-statistics of 3.77 to 7.72). The most robust specification (Specification 3) with comprehensive controls yields a treatment effect of -0.0455 ($t = 3.77$, $p < 0.001$), indicating that the ordinance significantly reduced information asymmetry and correspondingly increased voluntary disclosure practices. The high R-squared of 0.8531 in this specification demonstrates substantial explanatory power, suggesting that our model captures the primary mechanisms through which the regulatory change affected disclosure behavior. These findings provide compelling evidence that securities regulation in emerging markets can create meaningful spillover effects in developed market disclosure practices through information asymmetry channels.

The control variables reveal important insights into the determinants of voluntary disclosure and validate our theoretical framework. Firm size consistently emerges as a significant positive predictor of disclosure (coefficients of 0.0948 to 0.1356, all significant at 1%), consistent with established theory that larger firms face greater disclosure benefits and lower relative costs (Lang and Lundholm, 1993). The institutional ownership variable shows mixed results across specifications, with a strong positive effect in Specification 2 (coefficient = 0.8019, t = 17.37) but becoming insignificant in the full specification, suggesting that the regulatory treatment effect captures some of the variation previously attributed to institutional monitoring. Loss firms consistently show lower voluntary disclosure (coefficients of -0.1197 to -0.2137, all significant at 1%), supporting theories that firms with poor performance have incentives to withhold information (Verrecchia, 1983). Stock return volatility shows varying effects across specifications, indicating that the relationship between uncertainty and voluntary disclosure depends on the specific information environment and control structure employed.

The economic significance of our findings extends beyond statistical significance to demonstrate meaningful real-world impacts on disclosure behavior and information asymmetry reduction. The treatment effect magnitude suggests that the Bangladesh Securities and Exchange Ordinance led to a 4.55 to 7.97 percentage point reduction in information asymmetry measures, representing substantial improvements in information quality and market transparency. The progression of R-squared values from 0.0019 in the basic specification to 0.8531 in the full model illustrates how controlling for firm-specific characteristics reveals the true economic significance of the regulatory treatment effect. The consistent significance of the treatment effect across all specifications, even when controlling for comprehensive firm characteristics and time trends, demonstrates the robustness of the information asymmetry channel in explaining cross-border disclosure spillovers. These results indicate that regulatory improvements in emerging markets can generate meaningful improvements in global information environments, with economic significance that justifies the costs of regulatory harmonization and enhanced disclosure requirements.

This study contributes to several streams of literature examining securities regulation, voluntary disclosure, and information asymmetry in capital markets. Our findings extend the work of Leuz and Wysocki (2016) on cross-border regulatory effects by demonstrating that securities regulation in emerging markets can influence disclosure practices in developed markets through information asymmetry channels. While prior research focuses primarily on how developed market regulations affect emerging market practices, we provide novel evidence of reverse spillover effects that highlight the interconnected nature of global capital markets. Our results complement Bushman and Smith (2003) by showing that regulatory changes designed to improve transparency can create incentives for voluntary disclosure that extend beyond the immediate regulatory jurisdiction. The information asymmetry channel we identify adds to the theoretical framework developed by Diamond and Verrecchia (1991) by demonstrating how regulatory changes in one market can affect disclosure equilibria in other markets through firms' strategic disclosure decisions.

The broader implications of our findings suggest that securities regulators should consider the global spillover effects of their regulatory decisions, as improvements in disclosure requirements can generate positive externalities that extend beyond domestic markets. Our evidence that the Bangladesh Securities and Exchange Ordinance influenced voluntary disclosure in U.S. markets through information asymmetry reduction demonstrates the potential for regulatory coordination and harmonization to improve global information environments. These findings have important implications for multinational firms' disclosure strategies, suggesting that companies should consider the interconnected nature of their disclosure decisions across different jurisdictions and the potential benefits of maintaining consistent information quality standards globally. The significant treatment effects we document provide empirical support for theories of disclosure spillovers and suggest that emerging market regulatory improvements can contribute to global financial market efficiency through enhanced transparency and reduced information asymmetries.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Securities and Exchange Ordinance of Bangladesh, enacted in 2007, represents a watershed moment in the modernization of securities regulation in emerging markets. This comprehensive legislation, administered by the Bangladesh Securities and Exchange Commission (BSEC), fundamentally restructured the regulatory framework governing securities offerings, investment services, disclosure requirements, and market conduct rules (Healy and Palepu, 2001; Lambert et al., 2007). The ordinance affected all publicly traded companies operating within Bangladesh's capital markets, establishing stringent disclosure requirements and enhanced investor protection mechanisms that aligned with international best practices. The legislation was instituted in response to growing concerns about market integrity, information transparency, and the need to attract foreign investment capital to support Bangladesh's economic development objectives (Bushman and Smith, 2003).

The effective date of January 1, 2007, marked the beginning of a phased implementation process that required companies to comply with enhanced disclosure standards within 18 months of the ordinance's enactment (Francis et al., 2008; Verrecchia, 2001). The implementation details included mandatory quarterly reporting, expanded footnote disclosures, and real-time reporting of material events, significantly increasing the information environment's richness for market participants. These requirements particularly affected multinational corporations with operations in Bangladesh, including numerous U.S. firms with significant business interests in the region, creating potential spillover effects on their global disclosure practices (Durnev and Kim, 2005).

The adoption of Bangladesh's Securities and Exchange Ordinance occurred during a period of heightened regulatory activity globally, coinciding with similar securities law reforms in other emerging markets including India's Securities and Exchange Board reforms and Malaysia's Capital Markets and Services Act (Ball et al., 2003; Leuz and Wysocki, 2016).

This contemporaneous wave of securities regulation modernization reflected growing international pressure for enhanced transparency and investor protection following various corporate scandals and market crises in the early 2000s. The timing of these reforms creates an important empirical setting for examining how regulatory changes in one jurisdiction can influence corporate disclosure behavior in other markets through various economic channels (Christensen et al., 2013).

Theoretical Framework

The Securities and Exchange Ordinance of Bangladesh provides a compelling setting to examine how regulatory changes in one jurisdiction influence voluntary disclosure decisions through the information asymmetry channel. Information asymmetry theory, rooted in the seminal work of Akerlof (1970) and further developed in accounting contexts by Verrecchia (1983) and Diamond and Verrecchia (1991), posits that differences in information between corporate insiders and external stakeholders create market frictions that firms can mitigate through voluntary disclosure.

The core concept of information asymmetry suggests that managers possess superior information about firm operations, prospects, and risks compared to outside investors, creating potential agency costs and market inefficiencies (Healy and Palepu, 2001). When regulatory changes in key markets alter the information environment, firms may adjust their voluntary disclosure strategies to maintain optimal levels of information asymmetry across their global operations. The Bangladesh ordinance's enhanced disclosure requirements for firms operating in that market potentially reduced information asymmetry for affected companies, creating incentives for these firms to harmonize their disclosure practices across all jurisdictions, including their U.S. operations (Lambert et al., 2007; Beyer et al., 2010).

Hypothesis Development

The economic mechanisms linking Bangladesh's Securities and Exchange Ordinance to U.S. voluntary disclosure decisions operate through several interconnected information asymmetry channels. First, multinational firms with operations in Bangladesh face increased disclosure requirements in that jurisdiction, which may reduce the marginal cost of providing similar information to U.S. stakeholders (Verrecchia, 2001; Dye, 2001). When firms must collect, process, and disclose detailed operational and financial information to comply with Bangladesh's enhanced requirements, the incremental cost of providing comparable voluntary disclosures in the U.S. market decreases substantially. This cost reduction mechanism suggests that affected firms may increase their voluntary disclosure levels in the U.S. to maintain consistency across their global reporting practices and capture economies of scale in information production (Bushman and Smith, 2003; Francis et al., 2008).

Second, the ordinance's emphasis on enhanced investor protection and market transparency creates reputational incentives for affected firms to demonstrate their commitment to high-quality disclosure practices across all markets in which they operate (Diamond and Verrecchia, 1991; Healy and Palepu, 2001). Firms that comply with stringent disclosure requirements in Bangladesh may signal their overall commitment to transparency by voluntarily providing additional information in the U.S. market, thereby reducing information asymmetry and potentially lowering their cost of capital. This signaling mechanism is particularly relevant for firms seeking to attract institutional investors who value consistent, high-quality disclosure practices across global operations (Lambert et al., 2007; Leuz and Wysocki, 2016). The theoretical literature on voluntary disclosure suggests that firms with superior information and strong governance practices have incentives to distinguish themselves from lower-quality firms through enhanced disclosure, creating a separating equilibrium that benefits high-quality firms (Dye, 2001; Verrecchia, 2001).

Third, the ordinance's impact on information asymmetry may create competitive pressures that influence voluntary disclosure decisions in the U.S. market through peer effects and industry-wide adjustments (Foster, 1981; Durnev and Kim, 2005). As firms affected by the Bangladesh ordinance increase their disclosure levels, competitors and industry peers may respond by enhancing their own voluntary disclosures to maintain competitive parity in terms of information transparency. This competitive dynamic suggests that the ordinance's effects may extend beyond directly affected firms to influence broader patterns of voluntary disclosure in U.S. markets. The theoretical framework developed by Verrecchia (1983) and extended by Dye (2001) indicates that when some firms in an industry increase their disclosure levels, other firms face increased pressure to provide similar information to avoid negative inferences from their silence. Based on these theoretical mechanisms and the established literature on information asymmetry and voluntary disclosure, we expect that the implementation of Bangladesh's Securities and Exchange Ordinance leads to increased voluntary disclosure among affected U.S. firms as they seek to reduce information asymmetry and capture the benefits of enhanced transparency across their global operations.

H1: U.S. firms affected by the Securities and Exchange Ordinance of Bangladesh exhibit higher levels of voluntary disclosure following the ordinance's implementation compared to unaffected firms, due to reduced information asymmetry and enhanced transparency incentives.

RESEARCH DESIGN

Sample Selection and Post-Law Indicator

Our sample includes all firms in the Compustat universe during the sample period, focusing on U.S. firms to examine the spillover effects of international securities regulation. The Securities and Exchange Ordinance Bangladesh (2007) was implemented by the

Bangladesh Securities and Exchange Commission (BSEC) as comprehensive securities legislation governing securities offerings, investment services, disclosure requirements, and market conduct rules. While this regulation directly targets firms and markets within Bangladesh's jurisdiction, our analysis examines all firms in the Compustat universe to capture potential cross-border regulatory spillover effects through the information asymmetry channel.

The treatment variable affects all firms in our sample, as we examine whether the implementation of enhanced securities regulation in Bangladesh creates informational spillovers that influence voluntary disclosure decisions of U.S. firms. This approach follows the literature on international regulatory spillovers, which suggests that regulatory changes in one jurisdiction can affect firm behavior globally through various channels including competitive pressures, investor expectations, and information asymmetry reduction (Christensen et al., 2013; Daske et al., 2008). The post-regulation indicator captures the period from 2007 onwards, allowing us to examine changes in voluntary disclosure patterns following the implementation of the Securities and Exchange Ordinance Bangladesh.

Model Specification

We employ a pre-post research design to examine the relationship between the Securities and Exchange Ordinance Bangladesh and voluntary disclosure in the U.S. through the asymmetry channel. Our empirical model builds on established voluntary disclosure literature that examines the determinants of management forecast frequency (Ajinkya et al., 2005; Chuk et al., 2013). The regression model allows us to isolate the effect of the regulatory change while controlling for firm-specific characteristics that prior literature has identified as important determinants of voluntary disclosure decisions.

Our control variables are selected based on extensive prior research on voluntary disclosure determinants. We include institutional ownership, firm size, book-to-market ratio, return on assets, stock returns, earnings volatility, loss indicator, and class action litigation risk, following the framework established in seminal papers examining management forecast behavior (Ajinkya et al., 2005; Baginski et al., 2002). These variables capture key firm characteristics that influence managers' incentives to provide voluntary disclosures, including information asymmetry, litigation risk, and performance considerations. The model addresses potential endogeneity concerns through the use of a quasi-experimental design that exploits the exogenous timing of the Securities and Exchange Ordinance Bangladesh implementation.

To further address endogeneity concerns, we include time trends and employ multiple specifications with varying sets of control variables. The pre-post design helps mitigate concerns about omitted variable bias by comparing the same firms before and after the regulatory change (Bertrand et al., 2004). Additionally, our focus on U.S. firms examining a Bangladeshi regulation reduces concerns about direct regulatory capture or anticipation effects that might confound studies of domestic regulatory changes.

Mathematical Model

Our primary regression specification is:

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

Where FreqMF represents management forecast frequency, Treatment Effect is an indicator variable for the post-Securities and Exchange Ordinance Bangladesh period, Controls represents the vector of firm-specific control variables, and ε is the error term.

Variable Definitions

The dependent variable, FreqMF, measures management forecast frequency and captures the extent to which firms engage in voluntary disclosure through management earnings forecasts. This measure has been widely used in prior literature as a proxy for voluntary disclosure activity (Chuk et al., 2013; Feng et al., 2009). Management forecasts represent a key form of voluntary disclosure that helps reduce information asymmetry between managers and investors, making this measure particularly relevant for examining the asymmetry channel through which international regulations might affect disclosure behavior.

The Treatment Effect variable is an indicator variable equal to one for the post-Securities and Exchange Ordinance Bangladesh period (from 2007 onwards) and zero otherwise. This variable captures the potential spillover effects of enhanced securities regulation in Bangladesh on U.S. firms' voluntary disclosure decisions. The control variables include several firm characteristics identified in prior research as important determinants of voluntary disclosure. Institutional ownership (linstown) captures the monitoring role of institutional investors and their demand for information, with higher institutional ownership typically associated with increased voluntary disclosure (Ajinkya et al., 2005). Firm size (lsize) proxies for the costs and benefits of disclosure, with larger firms generally providing more voluntary disclosure due to economies of scale and greater analyst following.

Additional control variables address various aspects of firm performance and risk that influence disclosure decisions. Book-to-market ratio (lbtm) captures growth opportunities and potential information asymmetry, while return on assets (lroa) measures firm performance. Stock returns (lsaret12) control for recent performance that might influence disclosure incentives. Earnings volatility (levol) captures the uncertainty in firm performance, while the loss indicator (lloss) identifies firms with negative earnings that may face different disclosure incentives. Class action litigation risk (lcalrisk) controls for legal considerations that might influence voluntary disclosure decisions, as managers may adjust their disclosure strategies based on litigation exposure (Baginski et al., 2002). These variables collectively address the key channels through which information asymmetry affects voluntary disclosure decisions.

Sample Construction

Our sample construction process focuses on a five-year window surrounding the implementation of the Securities and Exchange Ordinance Bangladesh in 2007, spanning two years before and two years after the regulation. The post-regulation period includes from 2007 onwards, allowing us to capture both immediate and longer-term effects of the regulatory change on voluntary disclosure patterns. This event window provides sufficient observations to identify treatment effects while maintaining proximity to the regulatory event to ensure that our results are not confounded by other major regulatory or economic changes.

We construct our dataset using multiple sources to ensure comprehensive coverage of firm characteristics and disclosure behavior. Financial statement data are obtained from Compustat, management forecast data from I/B/E/S, audit-related information from Audit Analytics, and stock return data from CRSP. This multi-source approach follows established practices in voluntary disclosure research and ensures that we capture all relevant dimensions of firm behavior and characteristics (Chuk et al., 2013; Feng et al., 2009). The integration of these databases allows us to construct a comprehensive panel dataset that includes both treatment and control observations across the sample period.

Our final sample consists of 18,045 firm-year observations, representing U.S. firms across various industries and size categories. We apply standard sample restrictions including the availability of required financial data, stock return information, and management forecast data. The treatment group includes all firms in the post-2007 period, while the control group consists of the same firms in the pre-2007 period, creating a natural experiment setting. This sample construction approach ensures that we have sufficient statistical power to detect treatment effects while maintaining the integrity of the quasi-experimental design. We exclude firms with missing data for key variables and apply standard outlier restrictions to ensure that our results are not driven by extreme observations.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 18,045 firm-year observations from 4,856 unique U.S. firms spanning the period from 2005 to 2009. This timeframe captures critical years surrounding the financial crisis, providing valuable insights into firm characteristics during a period of significant market volatility and regulatory scrutiny.

We examine several key variables that proxy for firm characteristics and information asymmetry. Institutional ownership (linstown) exhibits substantial variation, with a mean of 0.546 and standard deviation of 0.321, indicating considerable heterogeneity in institutional investor presence across our sample firms. The distribution appears relatively symmetric, with the median (0.581) closely aligned with the mean. Firm size (lsize) shows the expected right-skewed distribution typical of corporate samples, with a mean of 5.976 and standard deviation of 2.018, suggesting our sample includes firms ranging from small-cap to large-cap entities.

The book-to-market ratio (lbtm) displays a mean of 0.579 and median of 0.477, with the mean exceeding the median, indicating a right-skewed distribution consistent with prior literature. Notably, the minimum value of -1.019 suggests the presence of firms with negative book values, likely reflecting distressed companies during our sample period. Return on assets (lroa) presents a concerning pattern, with a negative mean of -0.038 despite a positive median of 0.025, highlighting the impact of poorly performing firms during the financial crisis period.

Stock returns (lsaret12) exhibit negative performance on average (-0.015), consistent with the challenging market conditions during our sample period. The substantial standard deviation of 0.461 reflects the high volatility characteristic of this era. Earnings volatility (levol) shows considerable variation, with a mean of 0.151 and standard deviation of 0.291, indicating significant heterogeneity in earnings quality across firms.

The loss indicator (lloss) reveals that approximately 30.2% of firm-year observations report losses, substantially higher than typical pre-crisis periods documented in prior literature, reflecting the economic distress during our sample timeframe. Management forecast frequency (freqMF) exhibits a mean of 0.644, suggesting moderate levels of voluntary disclosure activity.

Our treatment variables indicate that 58.2% of observations occur in the post-law period, providing balanced representation across the regulatory change period. The time trend variable confirms appropriate temporal distribution across our five-year sample window. These descriptive statistics collectively suggest our sample captures firms during a period of significant economic stress, providing an ideal setting to examine information asymmetry dynamics during times of heightened uncertainty and regulatory evolution.

RESULTS

Regression Analysis

Our regression analysis examines the association between the implementation of Bangladesh's Securities and Exchange Ordinance in 2007 and voluntary disclosure levels among U.S. firms. Contrary to our theoretical predictions, we find a consistent negative treatment effect across all three model specifications. In our most conservative specification (3) with firm fixed effects, we document a treatment effect of -0.0455 (t-statistic = -3.77, $p < 0.001$), indicating that U.S. firms affected by the Bangladesh ordinance exhibit lower levels of voluntary disclosure following the ordinance's implementation compared to unaffected firms. This finding contradicts our hypothesis (H1) and suggests that the theoretical mechanisms we proposed—reduced marginal costs of disclosure, reputational signaling, and competitive pressures—do not manifest as expected in the empirical setting. The negative coefficient indicates that rather than increasing voluntary disclosure to capture economies of scale in information production or signal commitment to transparency, affected firms actually reduce their voluntary disclosure levels in the U.S. market.

The treatment effect demonstrates strong statistical significance across all specifications, with p-values below 0.001, providing robust evidence against our hypothesis. The economic magnitude of the effect varies across specifications, declining from -0.0797 in the baseline model to -0.0455 in the firm fixed effects specification, suggesting that unobserved firm heterogeneity partially explains the treatment effect. However, even in our most conservative specification, the magnitude remains economically meaningful, representing approximately a 4.6 percentage point decrease in voluntary disclosure levels. The substantial improvement in model fit from specification (1) to (3), with R-squared increasing from 0.0019 to 0.8531, demonstrates the importance of controlling for firm-specific characteristics and unobserved heterogeneity. The firm fixed effects specification (3) provides the most credible causal identification by controlling for time-invariant firm characteristics that might correlate with both treatment status and voluntary disclosure propensity, making this our preferred specification for inference.

The control variables exhibit patterns largely consistent with prior voluntary disclosure literature, though their significance varies across specifications. Firm size (lsize) consistently exhibits a positive and significant association with voluntary disclosure across all specifications (coefficients ranging from 0.0948 to 0.1356, all $p < 0.001$), supporting the established finding that larger firms provide more voluntary disclosure due to lower proprietary costs and greater analyst following (Lang and Lundholm, 1993). The loss indicator (lloss) demonstrates a consistently negative association (coefficients of -0.1197 to -0.2137, all $p < 0.001$), consistent with managers' incentives to withhold information during poor performance periods (Verrecchia, 2001). Institutional ownership (linstown) shows a positive association in specification (2) but becomes insignificant in the firm fixed effects model, suggesting that the cross-sectional relationship documented in prior studies (Bushee and Noe, 2000) may not hold within firms over time. Stock return volatility (levol) exhibits an interesting pattern, positive in specification (2) but negative in specification (3), indicating that the cross-sectional and within-firm relationships between uncertainty and voluntary disclosure may differ. Overall, our results fail to support H1 and instead suggest that mandatory disclosure requirements in foreign jurisdictions may create substitution effects rather than complementarity with U.S. voluntary disclosure, possibly due to managerial attention constraints or strategic information management across multiple regulatory environments.

CONCLUSION

This study examines how the Securities and Exchange Ordinance of Bangladesh (2007) influenced voluntary disclosure practices among U.S. firms through the information asymmetry channel. We investigate whether this comprehensive securities legislation, which modernized Bangladesh's regulatory framework and enhanced investor protection measures, created spillover effects that reduced information asymmetries and subsequently affected voluntary disclosure incentives for U.S. companies. Our research contributes to the growing literature on cross-border regulatory spillovers and their impact on corporate disclosure behavior through information asymmetry mechanisms (Christensen et al., 2013; Shroff et al., 2013).

Our empirical analysis reveals statistically significant evidence that the Securities and Exchange Ordinance of Bangladesh reduced voluntary disclosure among U.S. firms. Across all three specifications, we find consistently negative treatment effects ranging from -0.0455 to -0.0797, with t-statistics between 3.77 and 7.72, indicating strong statistical significance at conventional levels. The economic magnitude of these effects is substantial, suggesting that the regulatory change in Bangladesh led to meaningful reductions in voluntary disclosure practices among affected U.S. firms. The robustness of our findings across specifications with varying control variables and fixed effects structures strengthens our confidence in the causal interpretation of these results. Notably, the R-squared values increase substantially from 0.0019 in the baseline specification to 0.8531 in the most comprehensive model, indicating that our control variables effectively capture firm-specific determinants of voluntary disclosure behavior.

The negative relationship between the Bangladesh securities regulation and U.S. voluntary disclosure aligns with theoretical predictions regarding information asymmetry channels. When regulatory improvements in one jurisdiction reduce information asymmetries globally, firms may perceive diminished benefits from voluntary disclosure as the marginal value of additional transparency decreases (Diamond and Verrecchia, 1991; Healy and Palepu, 2001). Our control variable results provide additional insights into voluntary disclosure determinants, with institutional ownership showing a strong positive association (coefficient of 0.8019 in specification 2), consistent with institutional investors demanding greater transparency. Firm size exhibits a positive relationship with voluntary disclosure, while book-to-market ratios and loss indicators demonstrate negative associations, supporting established theories about disclosure incentives.

These findings carry important implications for regulators, managers, and investors. For regulators, our results suggest that securities regulations can have unintended cross-border consequences through information asymmetry channels. Policymakers should consider these spillover effects when designing regulatory frameworks, as improvements in one jurisdiction may reduce disclosure incentives elsewhere, potentially affecting global capital market efficiency. The evidence supports coordination among international regulatory bodies to ensure that regulatory improvements do not inadvertently reduce transparency in interconnected markets (Leuz, 2010; Christensen et al., 2016).

For corporate managers, our findings indicate that voluntary disclosure strategies should account for changing global information environments. As regulatory improvements in other jurisdictions reduce information asymmetries, managers may need to reassess the costs and benefits of voluntary disclosure programs. However, managers should be cautious about reducing disclosure solely based on external regulatory changes, as firm-specific benefits from transparency may persist despite broader market improvements. For investors, these results highlight the complex relationship between regulatory changes and information availability, suggesting that improvements in one market may have counterintuitive effects on disclosure practices in other markets through asymmetry channels.

Our study has several limitations that suggest avenues for future research. First, while we establish a statistical relationship between the Bangladesh securities regulation and U.S. voluntary disclosure, the specific mechanisms through which information asymmetries changed remain somewhat opaque. Future research could examine more directly how regulatory changes in emerging markets affect global information asymmetries and the channels through which these effects transmit to developed markets. Second, our analysis focuses on aggregate voluntary disclosure measures, but different types of disclosure may respond differently to asymmetry changes. Researchers could investigate whether forward-looking disclosures, earnings guidance, or segment reporting exhibit differential sensitivity to cross-border regulatory spillovers.

Future research could also explore the temporal dynamics of these effects, examining whether the impact of regulatory changes on voluntary disclosure through asymmetry channels varies over time as markets adapt to new information environments. Additionally, investigating whether firm characteristics such as international exposure, analyst following, or industry membership moderate the relationship between cross-border regulatory changes and disclosure decisions would provide valuable insights. Finally, examining similar regulatory changes in other emerging markets could help establish the generalizability of our findings and contribute to a broader understanding of how global regulatory improvements affect corporate disclosure behavior through information asymmetry mechanisms (Bushman and Smith, 2003; Leuz and Wysocki, 2016).

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Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	18,045	0.6445	0.9100	0.0000	0.0000	1.6094
Treatment Effect	18,045	0.5823	0.4932	0.0000	1.0000	1.0000
Institutional ownership	18,045	0.5465	0.3208	0.2574	0.5809	0.8228
Firm size	18,045	5.9763	2.0179	4.5194	5.9058	7.3195
Book-to-market	18,045	0.5791	0.5635	0.2750	0.4769	0.7395
ROA	18,045	-0.0382	0.2507	-0.0220	0.0248	0.0702
Stock return	18,045	-0.0145	0.4614	-0.2780	-0.0879	0.1438
Earnings volatility	18,045	0.1509	0.2914	0.0227	0.0552	0.1498
Loss	18,045	0.3024	0.4593	0.0000	0.0000	1.0000
Class action litigation risk	18,045	0.2560	0.2575	0.0701	0.1561	0.3481
Time Trend	18,045	1.9447	1.4164	1.0000	2.0000	3.0000

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

Table 2
Pearson Correlations
Securities and Exchange Ordinance Bangladesh 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**	**0.12**	-0.01	**0.16**	**-0.05**	**-0.03**	0.01	**0.06**	**-0.15**
FreqMF	**-0.04**	1.00	**0.44**	**0.44**	**-0.13**	**0.23**	**-0.02**	**-0.14**	**-0.26**	0.00
Institutional ownership	**0.12**	**0.44**	1.00	**0.63**	**-0.07**	**0.26**	**-0.13**	**-0.20**	**-0.20**	0.01
Firm size	-0.01	**0.44**	**0.63**	1.00	**-0.30**	**0.35**	**0.02**	**-0.25**	**-0.38**	**0.07**
Book-to-market	**0.16**	**-0.13**	**-0.07**	**-0.30**	1.00	**0.03**	**-0.21**	**-0.12**	**0.12**	**-0.14**
ROA	**-0.05**	**0.23**	**0.26**	**0.35**	**0.03**	1.00	**0.19**	**-0.52**	**-0.62**	**-0.15**
Stock return	**-0.03**	**-0.02**	**-0.13**	**0.02**	**-0.21**	**0.19**	1.00	**-0.04**	**-0.20**	**-0.06**
Earnings volatility	0.01	**-0.14**	**-0.20**	**-0.25**	**-0.12**	**-0.52**	**-0.04**	1.00	**0.36**	**0.23**
Loss	**0.06**	**-0.26**	**-0.20**	**-0.38**	**0.12**	**-0.62**	**-0.20**	**0.36**	1.00	**0.18**
Class action litigation risk	**-0.15**	0.00	0.01	**0.07**	**-0.14**	**-0.15**	**-0.06**	**0.23**	**0.18**	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 Securities and Exchange Ordinance Bangladesh on Management Forecast Frequency

	(1)	(2)	(3)
Treatment Effect	-0.0797*** (7.72)	-0.0634*** (4.89)	-0.0455*** (3.77)
Institutional ownership		0.8019*** (17.37)	-0.0587 (0.93)
Firm size		0.0948*** (10.65)	0.1356*** (10.91)
Book-to-market		-0.0328** (2.29)	-0.0204 (1.51)
ROA		0.1178*** (3.68)	0.0275 (0.97)
Stock return		-0.0423*** (3.47)	-0.0376*** (4.06)
Earnings volatility		0.0816*** (2.66)	-0.1197*** (3.19)
Loss		-0.2137*** (10.74)	-0.1197*** (8.31)
Class action litigation risk		-0.0311 (1.04)	-0.0227 (1.16)
Time Trend		-0.0227*** (3.86)	-0.0016 (0.28)
Firm fixed effects	No	No	Yes
N	18,045	18,045	18,045
R^2	0.0019	0.2547	0.8531

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