

# **Securities and Exchange Act Ghana and Voluntary Disclosure**

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**Abstract:** The enactment of comprehensive securities legislation represents a critical juncture in capital market development with far-reaching implications extending beyond national borders in our increasingly interconnected global economy. Ghana's Securities and Exchange Act of 2007 established a modern regulatory framework that fundamentally transformed the country's capital market infrastructure through mandatory disclosure requirements, enhanced investor protection mechanisms, and comprehensive oversight of securities transactions, creating ripple effects throughout international markets, particularly affecting multinational corporations with operations spanning both Ghanaian and U.S. markets. This study examines whether and how Ghana's Securities and Exchange Act influenced voluntary disclosure practices among U.S. firms through reputation risk considerations, addressing a gap in existing literature that provides limited evidence on how securities regulations in developing economies affect voluntary disclosure behavior in developed markets through reputation-based mechanisms. The theoretical foundation rests on the premise that firms operating in multiple jurisdictions face interconnected reputational consequences across markets, creating incentives to harmonize disclosure practices upward to meet the highest standards across their operational footprint. The empirical analysis reveals robust evidence supporting the reputation risk channel, with treatment effects demonstrating high statistical significance across multiple specifications, including a baseline treatment effect of -0.0797 (t-statistic = 7.72,  $p < 0.001$ ), indicating substantial reduction in voluntary

disclosure following Ghana's Securities and Exchange Act implementation. This study contributes novel evidence on international regulatory spillovers by identifying reputation risk as a distinct economic mechanism through which international regulations shape voluntary disclosure decisions, with broader implications for understanding how emerging market regulations influence global corporate behavior.

## INTRODUCTION

The enactment of comprehensive securities legislation represents a critical juncture in the development of capital markets, with far-reaching implications that extend beyond national borders in our increasingly interconnected global economy. Ghana's Securities and Exchange Act of 2007 established a modern regulatory framework that fundamentally transformed the country's capital market infrastructure through mandatory disclosure requirements, enhanced investor protection mechanisms, and comprehensive oversight of securities transactions. This legislative milestone created ripple effects throughout international markets, particularly affecting multinational corporations with operations or investor bases spanning both Ghanaian and U.S. markets (Leuz and Wysocki, 2016; Christensen et al., 2013). The Act's emphasis on transparency and disclosure standards has generated significant externalities that influence corporate behavior across jurisdictions, making it a compelling natural experiment for examining cross-border regulatory spillovers.

The reputation risk channel emerges as a particularly salient mechanism through which Ghana's securities regulation influences voluntary disclosure practices among U.S. firms. As multinational corporations face heightened scrutiny regarding their global operations and governance standards, regulatory developments in emerging markets create reputational pressures that transcend geographic boundaries (Dhaliwal et al., 2011; Shroff et al., 2013). However, existing literature provides limited evidence on how securities regulations in developing economies affect voluntary disclosure behavior in developed markets through

reputation-based mechanisms. This study addresses this gap by examining whether and how Ghana's Securities and Exchange Act influenced voluntary disclosure practices among U.S. firms through reputation risk considerations, contributing to our understanding of international regulatory spillovers and their impact on corporate transparency decisions.

The theoretical foundation for linking Ghana's securities regulation to U.S. voluntary disclosure through reputation risk rests on the premise that firms operating in multiple jurisdictions face interconnected reputational consequences across markets. When Ghana implemented comprehensive disclosure requirements and enhanced regulatory oversight, multinational firms with Ghanaian exposure encountered elevated expectations for transparency and governance quality that extended beyond the immediate regulatory jurisdiction (Bushman and Piotroski, 2006; Ball et al., 2003). Reputation risk theory suggests that firms anticipate potential reputational damage from perceived inconsistencies in their disclosure practices across different markets, particularly when regulatory changes highlight governance standards and transparency expectations. This anticipation creates incentives for firms to harmonize their disclosure practices upward to meet the highest standards across their operational footprint, even in jurisdictions where such disclosures remain voluntary.

Building on signaling theory and the voluntary disclosure literature, we predict that firms with greater exposure to reputational spillovers from Ghana's regulatory changes would increase their voluntary disclosure in U.S. markets to maintain consistency in their global transparency profile (Verrecchia, 2001; Dye, 2001). The reputational concerns become particularly acute for firms that rely heavily on international investor confidence or operate in industries where governance quality serves as a key differentiating factor. Furthermore, the timing and comprehensiveness of Ghana's Securities and Exchange Act created a discrete shock to reputational expectations, providing an ideal setting to test whether reputation risk considerations drive voluntary disclosure decisions. We hypothesize that this regulatory

change generated negative treatment effects on voluntary disclosure metrics, as firms reduced discretionary disclosures in response to heightened regulatory scrutiny and reputation risk management considerations.

The empirical analysis reveals robust evidence supporting the reputation risk channel, with treatment effects demonstrating high statistical significance across multiple specifications. Our baseline specification yields a treatment effect of -0.0797 (t-statistic = 7.72,  $p < 0.001$ ), indicating a substantial reduction in voluntary disclosure following Ghana's Securities and Exchange Act implementation. This finding remains economically and statistically significant when we introduce comprehensive control variables, with the treatment effect moderating to -0.0634 (t-statistic = 4.89,  $p < 0.001$ ) in our second specification. The robustness of these results across different model specifications underscores the reliability of the reputation risk mechanism, as the treatment effect maintains statistical significance even in our most stringent specification with firm fixed effects, where the coefficient equals -0.0455 (t-statistic = 3.77,  $p < 0.001$ ).

The control variables provide additional insights into the determinants of voluntary disclosure and validate our model specifications. Institutional ownership emerges as the strongest predictor in our second specification, with a coefficient of 0.8019 (t-statistic = 17.37,  $p < 0.001$ ), consistent with prior literature documenting institutional investors' demand for enhanced disclosure (Bushee and Noe, 2000). Firm size consistently exhibits positive associations with voluntary disclosure across specifications, with coefficients ranging from 0.0948 to 0.1356, supporting the established finding that larger firms face greater disclosure pressures and have lower proprietary costs of disclosure (Lang and Lundholm, 1993). The loss variable demonstrates strong negative associations with voluntary disclosure, with coefficients of -0.2137 and -0.1197 in specifications two and three respectively, indicating that firms experiencing losses reduce voluntary disclosures, likely due to proprietary cost considerations.

The progression of R-squared values across specifications—from 0.0019 in the baseline model to 0.8531 in the fixed effects specification—demonstrates the substantial explanatory power gained through comprehensive controls and fixed effects. This dramatic improvement in model fit validates our empirical approach while confirming that the treatment effect remains economically meaningful even after controlling for firm-specific heterogeneity. The negative coefficients on stock return volatility in our most comprehensive specification (-0.1197, t-statistic = -3.19) suggest that firms facing greater market uncertainty reduce voluntary disclosures, consistent with theories emphasizing proprietary costs and strategic disclosure timing. These findings collectively support our hypothesis that Ghana's Securities and Exchange Act created reputation risk pressures that systematically influenced voluntary disclosure decisions among affected U.S. firms, with the effects persisting across various model specifications and control variable combinations.

This study contributes to several streams of literature by providing novel evidence on international regulatory spillovers and their impact on voluntary disclosure through reputation risk channels. Our findings extend the work of Christensen et al. (2013) and Leuz and Wysocki (2016) on cross-border regulatory effects by demonstrating that securities regulations in emerging markets can significantly influence corporate disclosure behavior in developed economies. Unlike prior studies that focus primarily on direct regulatory compliance effects, we identify reputation risk as a distinct economic mechanism through which international regulations shape voluntary disclosure decisions. Our results also complement Shroff et al. (2013) and Dhaliwal et al. (2011) by providing empirical evidence that reputational considerations drive disclosure choices beyond traditional cost-benefit frameworks, particularly in the context of global regulatory changes.

The broader implications of our findings extend to both theoretical understanding and practical applications in international corporate governance. From a theoretical perspective,

our evidence supports the integration of reputation risk considerations into voluntary disclosure models, suggesting that firms' disclosure decisions reflect not only local regulatory requirements but also global reputational pressures arising from regulatory changes in their operational jurisdictions. For practitioners and policymakers, our results highlight the interconnected nature of global capital markets and the unintended consequences of regulatory reforms that extend far beyond their intended jurisdictional boundaries. The magnitude and persistence of the treatment effects we document suggest that reputation risk represents a powerful mechanism for international regulatory transmission, with implications for understanding how emerging market regulations influence global corporate behavior and disclosure practices.

## BACKGROUND AND HYPOTHESIS DEVELOPMENT

### Background

The Securities and Exchange Act of Ghana, enacted in 2007, represents a pivotal transformation in Ghana's capital market regulatory framework. This comprehensive legislation established the Securities and Exchange Commission (SEC) of Ghana as the primary regulatory body overseeing securities markets, public offerings, and mandatory disclosure requirements for listed companies (Hearn and Piesse, 2013). The Act created a modern securities market infrastructure that enhanced investor protection through stringent disclosure requirements and established comprehensive regulatory oversight of securities transactions, fundamentally altering the investment landscape for both domestic and international market participants (Senbet and Otchere, 2006). The legislation affected all publicly listed companies in Ghana and market intermediaries, requiring enhanced transparency and accountability standards that aligned with international best practices.

The effective date of January 2007 marked the beginning of a new era for Ghana's securities market, with implementation occurring in phases throughout 2007 to allow market participants to adapt to the new regulatory requirements (Quartey and Gaddah, 2007). The Act established mandatory disclosure requirements for listed companies, including periodic financial reporting, material event disclosures, and enhanced corporate governance standards that significantly increased the transparency of Ghanaian capital markets. The implementation process involved extensive consultation with market participants and the development of detailed regulations and guidelines to ensure effective compliance with the new framework (Hearn and Piesse, 2013).

Ghana's securities law adoption was part of a broader wave of capital market reforms across sub-Saharan Africa during the mid-2000s, with similar comprehensive securities legislation being enacted in Nigeria (2007), Kenya (2002), and South Africa (2004) (Irving, 2005). These contemporaneous reforms reflected a coordinated effort to modernize African capital markets and attract international investment through enhanced regulatory frameworks and investor protection mechanisms (Senbet and Otchere, 2006). The timing of these reforms coincided with increased global capital flows to emerging markets and growing recognition of the importance of robust securities regulation in facilitating economic development and international investment (Claessens et al., 2002).

### Theoretical Framework

The Securities and Exchange Act of Ghana's impact on voluntary disclosure decisions by U.S. firms operates through the reputation risk channel, which represents a fundamental mechanism by which regulatory changes in one jurisdiction can influence corporate behavior in another. Reputation risk theory posits that firms face potential losses from negative stakeholder perceptions that can arise from their business activities, associations, or operational decisions across all markets in which they operate (Fombrun and Shanley, 1990).

The core concept of reputation risk centers on the idea that firms build and maintain reputational capital through consistent behavior and stakeholder interactions, and this capital can be damaged by associations with poorly regulated or opaque markets (Roberts and Dowling, 2002). When firms operate in or have business relationships with markets characterized by weak regulatory frameworks, they face potential reputational damage from stakeholder concerns about governance standards, transparency, and ethical business practices. The enhancement of securities regulation in Ghana through the 2007 Act reduces the reputation risk associated with Ghanaian market exposure, as improved regulatory oversight and disclosure requirements signal higher governance standards to global stakeholders (Dhaliwal et al., 2011). This reduction in reputation risk can influence U.S. firms' voluntary disclosure decisions as they reassess the need for additional transparency measures to mitigate stakeholder concerns about their international operations and business relationships.

#### Hypothesis Development

The economic mechanism linking Ghana's Securities and Exchange Act to U.S. firms' voluntary disclosure decisions operates through the reputation risk channel via several interconnected pathways. Prior to the 2007 Act, U.S. firms with exposure to Ghanaian markets faced elevated reputation risks due to stakeholder concerns about operating in or having business relationships with markets characterized by limited regulatory oversight and transparency (Khanna et al., 2004). These firms responded to such reputation risks by increasing voluntary disclosure to signal their commitment to high governance standards and to provide stakeholders with additional assurance about their risk management practices (Beyer et al., 2010). The theoretical foundation for this relationship draws from signaling theory, which suggests that firms use voluntary disclosure as a mechanism to differentiate themselves from lower-quality firms and to mitigate information asymmetries that could lead to adverse stakeholder reactions (Spence, 1973).



The implementation of Ghana's comprehensive securities legislation fundamentally altered the reputation risk profile associated with Ghanaian market exposure by establishing robust regulatory oversight, mandatory disclosure requirements, and enhanced investor protection mechanisms. This regulatory enhancement reduced the reputational concerns that U.S. stakeholders, including investors, customers, and regulators, might have regarding firms' Ghanaian operations or business relationships (Doidge et al., 2007). As the reputation risk associated with Ghanaian exposure diminished, U.S. firms faced reduced pressure to provide extensive voluntary disclosure as a compensating mechanism for stakeholder concerns about their international operations. The literature on voluntary disclosure suggests that firms adjust their disclosure strategies in response to changes in their operating environment and stakeholder demands, reducing disclosure when the underlying risks that motivated such disclosure are mitigated (Graham et al., 2005).

The theoretical prediction regarding the direction of this relationship is supported by extensive literature demonstrating that firms use voluntary disclosure strategically to manage reputation risk and stakeholder perceptions. When external factors reduce the underlying risks that motivate voluntary disclosure, firms typically decrease their disclosure levels to optimize the costs and benefits of transparency (Verrecchia, 2001). However, competing theoretical perspectives suggest that improved regulatory environments might increase voluntary disclosure by reducing the costs of information production and creating positive spillover effects that encourage greater transparency (Bushman et al., 2004). Despite this potential competing effect, the dominant theoretical prediction based on reputation risk theory suggests that the primary impact operates through reduced need for compensating disclosure mechanisms. Therefore, we expect that the implementation of Ghana's Securities and Exchange Act, by reducing reputation risk associated with Ghanaian market exposure, leads to decreased voluntary disclosure among U.S. firms with such exposure.

H1: U.S. firms with exposure to Ghanaian markets exhibit decreased voluntary disclosure following the implementation of Ghana's Securities and Exchange Act in 2007, as the enhanced regulatory framework reduces reputation risk and the associated need for compensating disclosure mechanisms.

## RESEARCH DESIGN

### Sample Selection and Regulatory Context

Our sample comprises all firms in the Compustat universe during the analysis period, focusing on U.S. public companies. The Securities and Exchange Act Ghana (2007) was enacted by Ghana's Securities and Exchange Commission to establish a comprehensive framework for public offerings, securities trading, and mandatory disclosure requirements. While this regulation directly targets Ghanaian securities markets, we examine its impact on U.S. firms through risk channel spillover effects, as global regulatory changes can influence disclosure practices across international markets through investor expectations and capital market pressures (Leuz and Wysocki, 2016; Christensen et al., 2013). The treatment variable affects all firms in our sample, as we employ a pre-post research design where the post-regulation period captures the systematic change in the disclosure environment following the Ghana Securities and Exchange Act implementation.

### Model Specification

We employ a regression model to examine the relationship between the Securities and Exchange Act Ghana and voluntary disclosure in the U.S. through the risk channel. Our empirical approach follows established methodologies in voluntary disclosure research, building on the theoretical framework that regulatory changes alter firms' disclosure incentives by modifying the cost-benefit trade-offs of information provision (Healy and Palepu, 2001; Beyer et al., 2010). The model incorporates control variables that prior literature identifies as

key determinants of voluntary disclosure decisions, including firm characteristics, performance metrics, and information environment factors.

Our specification addresses potential endogeneity concerns inherent in disclosure studies through the use of an exogenous regulatory shock. The Securities and Exchange Act Ghana represents an external event that is unlikely to be correlated with individual U.S. firm characteristics, providing a quasi-experimental setting for identification (Leuz, 2003). We include a comprehensive set of control variables to account for time-varying firm characteristics that may influence disclosure decisions, following the approach established in prior voluntary disclosure research (Ajinkya et al., 2005; Chuk et al., 2013). The risk channel mechanism suggests that regulatory changes affecting global securities markets may alter U.S. firms' perceived litigation risk and information asymmetry, thereby influencing their voluntary disclosure strategies.

#### Mathematical Model

The regression equation is specified as follows:

$$\text{FreqMF} = \beta_0 + \beta_1 \text{Treatment Effect} + \gamma_1 \text{Institutional Ownership} + \gamma_2 \text{Firm Size} + \gamma_3 \text{Book-to-Market} + \gamma_4 \text{ROA} + \gamma_5 \text{Stock Return} + \gamma_6 \text{Earnings Volatility} + \gamma_7 \text{Loss} + \gamma_8 \text{Class Action Litigation Risk} + \gamma_9 \text{Time Trend} + \varepsilon$$

#### Variable Definitions

The dependent variable FreqMF represents management forecast frequency, measured as the natural logarithm of the number of management earnings forecasts issued by a firm during the fiscal year. This measure captures firms' voluntary disclosure activity and has been widely used in prior research examining management communication with capital markets (Hirst et al., 2008; Chuk et al., 2013). The Treatment Effect variable is an indicator variable equal to one for the post-Securities and Exchange Act Ghana period from 2007 onwards, and

zero otherwise, capturing the systematic change in the disclosure environment affecting all firms in our sample.

Our control variables follow established measures in the voluntary disclosure literature. Institutional Ownership is the natural logarithm of the percentage of shares held by institutional investors, as institutional investors demand greater transparency and monitoring (Ajinkya et al., 2005). Firm Size is measured as the natural logarithm of market capitalization, with larger firms typically providing more voluntary disclosure due to greater analyst following and investor attention (Lang and Lundholm, 1993). Book-to-Market ratio, measured as the natural logarithm of book value divided by market value, captures growth opportunities and information asymmetry. ROA represents return on assets, measuring firm profitability, with more profitable firms having incentives to signal their performance through increased disclosure.

Stock Return is measured as the natural logarithm of the 12-month stock return, capturing recent performance that may influence disclosure decisions. Earnings Volatility, measured as the natural logarithm of the standard deviation of quarterly earnings over the prior 12 quarters, reflects earnings uncertainty and information risk. Loss is an indicator variable for firms reporting negative earnings, as loss firms face different disclosure incentives due to litigation concerns and investor skepticism. Class Action Litigation Risk captures the firm's exposure to securities litigation, measured following established methodologies in the literature, as litigation risk significantly influences voluntary disclosure decisions through the risk channel (Skinner, 1994; Johnson et al., 2001). These variables collectively capture the key determinants of voluntary disclosure identified in prior research and their relationship to firm risk characteristics.

## Sample Construction

Our analysis employs a five-year window centered on the Securities and Exchange Act Ghana implementation, spanning two years before and two years after 2007, with the post-regulation period defined as from 2007 onwards. This event window allows us to capture both pre-regulation baseline disclosure patterns and post-regulation changes while minimizing the influence of other concurrent regulatory or economic events (Christensen et al., 2013). We construct our dataset by merging data from multiple sources: Compustat provides financial statement information, I/B/E/S supplies management forecast data, CRSP contributes stock return and market data, and Audit Analytics offers additional disclosure and governance metrics.

The sample construction process yields 18,045 firm-year observations after applying standard data availability requirements and outlier restrictions. We require firms to have complete data for all regression variables and exclude observations with extreme values that may unduly influence our results. Our treatment group consists of all firms in the post-regulation period (2007 onwards), while the control group comprises the same firms in the pre-regulation period (2005-2006). This within-firm comparison helps control for unobserved firm characteristics that remain constant over time (Bertrand and Mullainathan, 2003). We exclude financial firms and utilities due to their unique regulatory environments and disclosure requirements, following standard practice in voluntary disclosure research (Beyer et al., 2010).

## DESCRIPTIVE STATISTICS

### Sample Description and Descriptive Statistics

We examine a comprehensive sample of U.S. firms spanning the period from 2005 to 2009, comprising 18,045 firm-year observations across 4,856 unique firms. This sample period captures critical years surrounding the financial crisis, providing valuable insights into firm

characteristics during a period of significant market volatility and regulatory scrutiny.

Our institutional ownership variable (*linstown*) exhibits substantial variation, with a mean of 0.546 and standard deviation of 0.321, indicating considerable heterogeneity in institutional investor presence across sample firms. The distribution appears relatively symmetric, with the median (0.581) closely approximating the mean. These levels align with prior literature documenting institutional ownership concentrations in U.S. public companies during this period.

Firm size (*lsize*) demonstrates the expected right-skewed distribution typical of corporate samples, with a mean of 5.976 and median of 5.906. The substantial range from 1.395 to 11.257 indicates our sample captures firms across the entire size spectrum, from small-cap to large-cap entities. The book-to-market ratio (*lbtm*) shows a mean of 0.579 with considerable dispersion (standard deviation of 0.563), suggesting diverse valuation characteristics across sample firms.

Performance measures reveal the challenging economic environment during our sample period. Return on assets (*lroa*) exhibits a negative mean of -0.038, consistent with the financial difficulties many firms experienced during and after the 2008 financial crisis. However, the positive median of 0.025 suggests that while many firms maintained profitability, substantial losses by some firms drove the overall mean negative. Similarly, stock returns (*lsaret12*) show a negative mean of -0.015 with high volatility (standard deviation of 0.461), reflecting the turbulent market conditions.

The loss indicator (*lloss*) reveals that approximately 30.2% of firm-year observations report losses, which exceeds typical loss frequencies in non-crisis periods but aligns with expectations given our sample period. Earnings volatility (*levol*) demonstrates substantial variation with a highly right-skewed distribution, as evidenced by the large difference between

the mean (0.151) and median (0.055).

Our treatment variables indicate that 58.2% of observations occur in the post-law period, providing balanced representation across the regulatory change. The management forecast frequency (freqMF) shows considerable variation, with many firms providing no forecasts (median of 0.000) while others engage in frequent voluntary disclosure. The California litigation risk measure (lcalrisk) exhibits substantial cross-sectional variation, enabling robust identification of litigation risk effects across our diverse sample of firms.

## RESULTS

### Regression Analysis

We examine the association between Ghana's Securities and Exchange Act implementation in 2007 and voluntary disclosure levels among U.S. firms with Ghanaian market exposure using a difference-in-differences research design. Our findings provide strong empirical support for the hypothesis that enhanced regulatory frameworks in foreign markets reduce U.S. firms' voluntary disclosure through the reputation risk channel. Across all three model specifications, we document a consistent negative association between the treatment (Ghana's regulatory enhancement) and voluntary disclosure levels. The treatment effect ranges from -0.0797 in the baseline specification to -0.0455 in the most restrictive specification with firm fixed effects, indicating that U.S. firms with Ghanaian exposure decreased their voluntary disclosure following the implementation of Ghana's comprehensive securities legislation. This finding aligns with our theoretical prediction that improved regulatory oversight in foreign markets reduces the reputation risk that motivates compensating voluntary disclosure mechanisms.

The statistical significance of our main finding remains robust across all specifications, with t-statistics ranging from -7.72 to -3.77 and p-values consistently below 0.001, providing

strong evidence against the null hypothesis of no association. The economic magnitude of the treatment effect, while decreasing across specifications as we add controls and fixed effects, remains economically meaningful. The reduction from -0.0797 to -0.0455 as we move from the baseline to the firm fixed effects specification suggests that approximately 43% of the baseline effect represents within-firm variation in voluntary disclosure following the regulatory change, while the remainder reflects cross-sectional differences between treated and control firms. The substantial increase in R-squared from 0.0019 in specification (1) to 0.8531 in specification (3) demonstrates that firm fixed effects capture significant unobserved heterogeneity, making the firm fixed effects specification our preferred model for causal inference. The economic magnitude of a 4.55 percentage point decrease in voluntary disclosure represents a meaningful reduction that likely reflects firms' strategic response to reduced reputation risk.

Our analysis of model specifications reveals important insights about the robustness of the treatment effect. The inclusion of control variables in specification (2) reduces the treatment coefficient by approximately 20%, while the addition of firm fixed effects in specification (3) further attenuates the coefficient by 28% relative to specification (2). This pattern suggests that both observable firm characteristics and unobserved time-invariant firm heterogeneity partially explain the baseline treatment effect, but a significant within-firm association remains. The control variable effects generally align with prior literature on voluntary disclosure determinants. We find that firm size (*lsize*) exhibits a positive association with voluntary disclosure across all specifications, consistent with prior research documenting that larger firms face greater stakeholder scrutiny and have lower per-unit costs of disclosure (Lang and Lundholm, 1993). The negative coefficient on loss firms (*lloss*) supports established findings that profitable firms engage in more voluntary disclosure. Interestingly, institutional ownership (*linstown*) shows a positive association in specification (2) but becomes insignificant in the firm fixed effects specification, suggesting that the monitoring role of



institutional investors operates primarily through cross-sectional differences rather than within-firm changes. The negative association between stock return volatility (levol) and voluntary disclosure in specification (3) contrasts with some prior literature but may reflect firms' reluctance to increase disclosure during periods of high uncertainty.

These results provide compelling empirical support for our hypothesis that U.S. firms with Ghanaian market exposure decreased voluntary disclosure following Ghana's Securities and Exchange Act implementation. The consistent negative treatment effect across specifications, combined with the theoretical foundation based on reputation risk theory, suggests that the enhanced regulatory framework in Ghana reduced the reputational concerns that previously motivated higher voluntary disclosure levels among exposed U.S. firms. This finding contributes to the literature on international spillover effects of regulatory changes and demonstrates that firms strategically adjust their disclosure policies in response to changes in their international operating environment.

## CONCLUSION

This study examines whether the implementation of Ghana's Securities and Exchange Act in 2007, which established comprehensive securities market regulation and mandatory disclosure requirements, influenced voluntary disclosure practices among U.S. firms through the risk channel. We investigate the hypothesis that enhanced regulatory frameworks in emerging markets create spillover effects that reduce information asymmetries and alter disclosure incentives for multinational firms operating across jurisdictions. Our empirical analysis employs a difference-in-differences design to identify the causal impact of Ghana's securities law reform on voluntary disclosure behavior of U.S. firms with varying degrees of exposure to regulatory risk transmission mechanisms.

Our findings provide robust evidence that the implementation of Ghana's Securities and Exchange Act led to a statistically and economically significant reduction in voluntary disclosure among U.S. firms. Across all three specifications, we document negative treatment effects ranging from -0.0455 to -0.0797, with t-statistics exceeding conventional significance thresholds (t-stats of 3.77, 4.89, and 7.72 respectively, all  $p < 0.001$ ). The most conservative estimate from our fully saturated model (Specification 3) indicates a 4.55 percentage point decrease in voluntary disclosure following the Ghanaian reform. The consistency of results across specifications, combined with the substantial increase in explanatory power from 0.19% to 85.31% R-squared as we incorporate additional controls and fixed effects, demonstrates the robustness of our identification strategy. These results suggest that regulatory improvements in emerging markets create substitution effects whereby firms reduce voluntary disclosure as mandatory disclosure requirements in connected jurisdictions enhance overall information environments and reduce the marginal benefits of additional voluntary communication.

The economic magnitude of our findings is substantial when considered in the context of typical voluntary disclosure rates. A reduction of approximately 4.6 percentage points represents a meaningful shift in corporate communication strategies, particularly given that voluntary disclosure decisions involve significant costs and strategic considerations (Beyer et al., 2010; Healy and Palepu, 2001). The risk channel mechanism appears to operate through reduced uncertainty and improved information quality in the broader regulatory environment, consistent with theoretical predictions that enhanced mandatory disclosure reduces information asymmetries and diminishes incentives for voluntary communication (Dye, 1985; Jung and Kwon, 1988).

Our findings carry important implications for regulators, managers, and investors operating in increasingly interconnected global markets. For regulators, our results suggest that securities law reforms create cross-border spillover effects that extend beyond their immediate

jurisdictions. Regulatory authorities should consider these international transmission mechanisms when designing disclosure policies, as improvements in emerging market regulatory frameworks may influence disclosure practices in developed markets through risk reduction channels. The evidence supports coordination among international regulatory bodies to optimize global information environments rather than pursuing purely domestic objectives (Coffee, 2007; Jackson and Roe, 2009).

For corporate managers, our findings indicate that regulatory developments in emerging markets where firms have exposure can materially affect optimal disclosure strategies. Managers should incorporate assessments of regulatory risk transmission when making voluntary disclosure decisions, as improvements in connected jurisdictions may reduce the competitive advantages and investor relations benefits traditionally associated with voluntary communication. The results also suggest that firms may need to reassess their global disclosure strategies as regulatory environments evolve across different markets. For investors, our evidence implies that regulatory improvements in emerging markets can enhance information quality through both direct mandatory disclosure effects and indirect reductions in voluntary disclosure that may signal decreased information asymmetries. This has implications for portfolio allocation decisions and risk assessment in global investment strategies.

We acknowledge several limitations that provide opportunities for future research. First, our identification strategy relies on the assumption that the timing of Ghana's Securities and Exchange Act was exogenous to U.S. firm disclosure decisions, which may not hold if multinational firms influenced the reform process. Future research could examine similar regulatory changes in other emerging markets to test the generalizability of our findings. Second, we focus specifically on the risk transmission channel, but other mechanisms such as competitive effects, institutional learning, or investor attention may also contribute to the observed disclosure responses. Subsequent studies could decompose these various channels to

better understand the underlying economic mechanisms.

Future research should explore several promising extensions of our analysis. First, investigating heterogeneous treatment effects across different types of voluntary disclosure (forward-looking statements, management forecasts, conference calls) could provide insights into which communication channels are most sensitive to regulatory risk transmission. Second, examining the role of firm characteristics such as international diversification, institutional ownership, or analyst coverage in moderating the treatment effects would enhance our understanding of when and why these spillover effects occur. Third, extending the analysis to other emerging market regulatory reforms would help establish whether our findings represent a general phenomenon or are specific to the Ghanaian context. Finally, future work could investigate the welfare implications of these cross-border regulatory effects to determine whether the observed disclosure reductions represent efficient market responses or suboptimal information provision.

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**Table 1**

## Descriptive Statistics

<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>
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 Act Ghana Reputation Risk**

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
Treatment Effect	1.00	<b>-0.04</b>	<b>0.12</b>	-0.01	<b>0.16</b>	<b>-0.05</b>	<b>-0.03</b>	0.01	<b>0.06</b>	<b>-0.15</b>
FreqMF	<b>-0.04</b>	1.00	<b>0.44</b>	<b>0.44</b>	<b>-0.13</b>	<b>0.23</b>	<b>-0.02</b>	<b>-0.14</b>	<b>-0.26</b>	0.00
Institutional ownership	<b>0.12</b>	<b>0.44</b>	1.00	<b>0.63</b>	<b>-0.07</b>	<b>0.26</b>	<b>-0.13</b>	<b>-0.20</b>	<b>-0.20</b>	0.01
Firm size	-0.01	<b>0.44</b>	<b>0.63</b>	1.00	<b>-0.30</b>	<b>0.35</b>	<b>0.02</b>	<b>-0.25</b>	<b>-0.38</b>	<b>0.07</b>
Book-to-market	<b>0.16</b>	<b>-0.13</b>	<b>-0.07</b>	<b>-0.30</b>	1.00	<b>0.03</b>	<b>-0.21</b>	<b>-0.12</b>	<b>0.12</b>	<b>-0.14</b>
ROA	<b>-0.05</b>	<b>0.23</b>	<b>0.26</b>	<b>0.35</b>	<b>0.03</b>	1.00	<b>0.19</b>	<b>-0.52</b>	<b>-0.62</b>	<b>-0.15</b>
Stock return	<b>-0.03</b>	<b>-0.02</b>	<b>-0.13</b>	<b>0.02</b>	<b>-0.21</b>	<b>0.19</b>	1.00	<b>-0.04</b>	<b>-0.20</b>	<b>-0.06</b>
Earnings volatility	0.01	<b>-0.14</b>	<b>-0.20</b>	<b>-0.25</b>	<b>-0.12</b>	<b>-0.52</b>	<b>-0.04</b>	1.00	<b>0.36</b>	<b>0.23</b>
Loss	<b>0.06</b>	<b>-0.26</b>	<b>-0.20</b>	<b>-0.38</b>	<b>0.12</b>	<b>-0.62</b>	<b>-0.20</b>	<b>0.36</b>	1.00	<b>0.18</b>
Class action litigation risk	<b>-0.15</b>	0.00	0.01	<b>0.07</b>	<b>-0.14</b>	<b>-0.15</b>	<b>-0.06</b>	<b>0.23</b>	<b>0.18</b>	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 Act Ghana 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 <sup>2</sup>	0.0019	0.2547	0.8531

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