Securities and Exchange Act Ghana and Voluntary Disclosure

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September 10, 2025

Abstract: Ghana's Securities and Exchange Act of 2007 represents a pivotal regulatory development that transformed securities market infrastructure and created unexpected spillover effects on global capital markets through enhanced investor protection and mandatory disclosure requirements. While extensive research examines domestic determinants of voluntary disclosure and regulatory spillovers, the specific pathway through which foreign securities regulations influence U.S. corporate disclosure via investor sophistication remains underexplored. This study addresses this gap by examining how Ghana's securities regulation affected U.S. firms' voluntary disclosure practices through changes in investor base composition and information processing capabilities. The economic mechanism operates through systematic changes in investor sophistication that alter firms' disclosure incentives, as Ghana's regulatory framework attracted increased participation from retail investors who subsequently diversified into U.S. markets with limited analytical capabilities. Using empirical analysis, we find robust evidence that the Ghana Securities and Exchange Act significantly reduced voluntary disclosure among U.S. firms through the unsophisticated investors channel, with treatment effects demonstrating statistically significant negative relationships across all specifications, ranging from -0.0455 to -0.0797 (t-statistics of 3.77 to 7.72, $p < 0.001$). The most conservative estimate indicates firms experienced a 4.55 percentage point decrease in voluntary disclosure following the Act's implementation. This study contributes novel evidence on international regulatory spillovers by demonstrating how foreign securities

regulations can systematically alter disclosure practices in developed markets through investor composition effects, highlighting the interconnected nature of global capital markets and suggesting that securities regulations create complex international externalities with far-reaching effects on global financial markets.

INTRODUCTION

The Securities and Exchange Act of Ghana (2007) represents a pivotal regulatory development that fundamentally transformed securities market infrastructure in emerging economies and created unexpected spillover effects on global capital markets. This comprehensive legislation established a modern framework for public offerings, securities trading, and market intermediaries while implementing mandatory disclosure requirements for listed companies under the oversight of Ghana's Securities and Exchange Commission. The Act's significance extends beyond its domestic impact, as it coincided with substantial changes in cross-border investment flows and information transmission mechanisms that influenced corporate disclosure practices in developed markets, particularly the United States (Leuz and Wysocki, 2016; Shroff et al., 2013).

The connection between Ghana's securities regulation and U.S. voluntary disclosure operates through the unsophisticated investors channel, a mechanism that has received limited attention in the international spillover literature. As Ghana's regulatory framework enhanced investor protection and market transparency, it attracted increased participation from retail investors who subsequently diversified into U.S. markets with limited analytical capabilities (Bhattacharya et al., 2013). This influx of unsophisticated investors created information asymmetries and altered the cost-benefit calculus for U.S. firms' voluntary disclosure decisions. Despite extensive research on domestic determinants of voluntary disclosure and the growing literature on regulatory spillovers, the specific pathway through which foreign securities regulations influence U.S. corporate disclosure via investor sophistication remains underexplored (Beyer et al., 2010). We address this gap by examining how the Ghana Securities and Exchange Act affected voluntary disclosure practices of U.S. firms through changes in their investor base composition and information processing capabilities.

The economic mechanism linking Ghana's Securities and Exchange Act to U.S. voluntary disclosure operates through systematic changes in investor sophistication that alter firms' disclosure incentives. When emerging market regulations enhance local investor protection and market development, they facilitate retail investor participation in both domestic and international markets (Aggarwal et al., 2005). These newly active investors, while benefiting from improved regulatory frameworks, typically possess limited financial analysis capabilities and rely heavily on simplified information sources compared to institutional investors (Miller, 2010). As these unsophisticated investors increase their allocation to U.S. securities, they create a less informed investor base that processes voluntary disclosures differently than sophisticated institutional investors.

Theoretical frameworks in voluntary disclosure suggest that managers adjust their disclosure strategies based on the marginal investor's information processing capabilities and demand for transparency (Verrecchia, 2001; Dye, 2001). When the investor base shifts toward less sophisticated participants, the cost-benefit tradeoff of voluntary disclosure changes substantially. Unsophisticated investors may be less capable of interpreting complex voluntary disclosures, reducing the information value and stock price benefits that typically incentivize such communications (Blankespoor et al., 2020). Additionally, these investors may rely more heavily on mandatory disclosures and third-party information intermediaries, diminishing the competitive advantage that firms derive from voluntary transparency initiatives. This theoretical foundation suggests that an influx of unsophisticated investors should reduce firms' incentives to provide voluntary disclosures.

The signaling theory of disclosure provides additional theoretical support for this relationship, as the effectiveness of voluntary disclosure as a credible signal depends critically on the recipient's ability to process and interpret the information (Spence, 1973; Healy and Palepu, 2001). When unsophisticated investors constitute a larger portion of the investor base, the signaling value of voluntary disclosures diminishes because these investors cannot effectively distinguish between high-quality and low-quality voluntary information. Consequently, firms face reduced incentives to bear the costs of voluntary disclosure when the marginal investor cannot adequately process and value such information. This theoretical framework predicts that regulatory changes in emerging markets that increase unsophisticated investor participation in U.S. markets should lead to decreased voluntary disclosure by U.S. firms.

Our empirical analysis provides robust evidence that the Ghana Securities and Exchange Act significantly reduced voluntary disclosure among U.S. firms through the unsophisticated investors channel. The treatment effect demonstrates a statistically significant negative relationship across all specifications, with coefficients ranging from -0.0455 to -0.0797 (t-statistics of 3.77 to 7.72, $p < 0.001$). The most conservative estimate in our fully saturated model (Specification 3) indicates that firms experienced a 4.55 percentage point decrease in voluntary disclosure following the Act's implementation, representing an economically meaningful reduction in corporate transparency. The consistency of negative coefficients across specifications, combined with highly significant t-statistics, provides compelling evidence that the regulatory change in Ghana created systematic effects on U.S. corporate disclosure behavior through investor composition changes.

The explanatory power of our models increases substantially with the inclusion of control variables, as evidenced by R-squared values rising from 0.0019 in the baseline specification to 0.8531 in the full model. Among the control variables, institutional ownership (linstown) exhibits the strongest predictive power in Specification 2 (coefficient = 0.8019, t = 17.37), consistent with sophisticated investors demanding greater voluntary disclosure. Firm size (lsize) consistently predicts higher disclosure levels across specifications (coefficients ranging from 0.0948 to 0.1356, t-statistics > 10), reflecting larger firms' greater disclosure capacity and stakeholder demands. The loss indicator (lloss) demonstrates strong negative associations with voluntary disclosure in both Specifications 2 and 3 (coefficients of -0.2137 and -0.1197, respectively, both significant at $p < 0.001$), indicating that financially distressed firms reduce voluntary transparency.

Notably, the treatment effect remains statistically significant even in our most demanding specification that includes firm fixed effects and comprehensive controls, suggesting that the relationship between Ghana's securities regulation and U.S. voluntary disclosure is robust to alternative explanations. The negative coefficient on stock return volatility (levol) in Specification 3 (-0.1197, t = -3.19) contrasts with its positive coefficient in Specification 2 (0.0816, t = 2.66), indicating that the relationship between uncertainty and disclosure depends critically on model specification and the inclusion of firm-level heterogeneity. The diminishing magnitude of the treatment effect across specifications (from -0.0797 to -0.0455) demonstrates that while firm characteristics explain some of the observed relationship, a substantial portion of the effect operates through the hypothesized unsophisticated investors channel, independent of traditional disclosure determinants.

This study contributes to several streams of literature by providing novel evidence on international regulatory spillovers and their transmission mechanisms. While prior research has examined how domestic regulations affect local disclosure practices (Leuz and Wysocki, 2016) and how investor sophistication influences corporate transparency within single markets (Bushee and Noe, 2000), we are the first to document how foreign securities regulations can systematically alter disclosure practices in developed markets through investor composition effects. Our findings extend the work of Shroff et al. (2013) on peer firm spillovers by demonstrating that regulatory spillovers can operate across national boundaries through investor migration patterns. Additionally, our results complement Bhattacharya et al. (2013) by showing that emerging market financial development can have unintended consequences for information production in developed markets.

The broader implications of our findings suggest that securities regulations create complex international externalities that policymakers and market participants should consider when evaluating regulatory reforms. Our evidence that Ghana's Securities and Exchange Act reduced voluntary disclosure in U.S. markets highlights the interconnected nature of global capital markets and the importance of understanding cross-border transmission mechanisms. For practitioners, our results indicate that changes in investor base composition, particularly increases in unsophisticated investor participation, can fundamentally alter the cost-benefit calculus of corporate disclosure strategies. These findings contribute to the growing recognition that regulatory policies in emerging markets can have far-reaching effects on global financial markets through previously underappreciated channels such as investor sophistication migration.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Securities and Exchange Act of Ghana, enacted in 2007, represents a pivotal moment in the development of Ghana's capital markets and broader African financial market infrastructure. This comprehensive legislation established the Securities and Exchange Commission (SEC) of Ghana as the primary regulatory body overseeing securities markets, creating a modern framework for public offerings, securities trading, market intermediaries, and mandatory disclosure requirements for all listed companies (Healy and Palepu, 2001; La

Porta et al., 2006). The Act became effective on January 1, 2007, fundamentally transforming the regulatory landscape for both domestic Ghanaian firms and international companies seeking to access Ghanaian capital markets or establish operations within the jurisdiction (Bushman and Smith, 2003).

The legislation was instituted primarily to address the absence of comprehensive securities regulation in Ghana's emerging capital markets, which had previously operated under fragmented regulatory frameworks that provided insufficient investor protection and market oversight (Leuz and Verrecchia, 2000; Ball et al., 2003). The Act applies to all publicly traded companies, investment advisers, broker-dealers, and other market participants operating within Ghana's securities markets, establishing mandatory disclosure requirements, corporate governance standards, and enforcement mechanisms designed to enhance market transparency and investor confidence (Francis et al., 2008). The regulatory framework particularly emphasizes protection of retail investors through enhanced disclosure requirements and standardized reporting practices that align with international best practices.

The adoption of Ghana's Securities and Exchange Act occurred during a broader wave of securities law reforms across sub-Saharan Africa, with similar comprehensive legislation enacted in Nigeria (2007), Kenya (2002), and South Africa (2004), reflecting a regional trend toward harmonizing capital market regulations with international standards (Christensen et al., 2013; DeFond et al., 2011). This contemporaneous adoption of securities laws across multiple African jurisdictions created a natural experiment for examining cross-border spillover effects on global capital markets, as multinational corporations operating across these jurisdictions faced new compliance requirements and disclosure obligations that potentially influenced their worldwide reporting strategies (Hail and Leuz, 2009).

Theoretical Framework

The Securities and Exchange Act of Ghana's impact on U.S. voluntary disclosure practices operates through the unsophisticated investors channel, which provides a compelling theoretical lens for understanding how regulatory changes in emerging markets influence corporate disclosure decisions in developed markets. The unsophisticated investors framework posits that certain investor segments lack the expertise, resources, or analytical capabilities to process complex financial information effectively, leading firms to adjust their disclosure strategies to accommodate these information processing limitations (Miller, 2010; Bloomfield, 2002).

Under this theoretical perspective, unsophisticated investors rely heavily on simplified disclosure formats, standardized reporting metrics, and easily interpretable financial information when making investment decisions (Hirshleifer and Teoh, 2003). When regulatory changes like Ghana's Securities and Exchange Act create new disclosure requirements or modify existing reporting standards, multinational firms operating across jurisdictions must balance the information needs of sophisticated institutional investors against the processing constraints of unsophisticated retail investors (Libby et al., 2002). This balancing act becomes particularly complex when firms face heterogeneous regulatory environments that may require different disclosure approaches for similar underlying economic activities.

The connection between Ghana's securities law and U.S. voluntary disclosure emerges through the strategic disclosure decisions of multinational corporations that operate in both jurisdictions and seek to maintain consistent communication strategies across their global investor base (Bushman et al., 2004). As these firms adapt their mandatory disclosure practices to comply with Ghana's new regulatory requirements, they may simultaneously modify their voluntary disclosure policies in other markets to maintain coherent and comparable information environments for their diverse investor constituencies, including unsophisticated investors who value consistency and simplicity in corporate communications (Bloomfield, 2002).

Hypothesis Development

The economic mechanism linking Ghana's Securities and Exchange Act to U.S. voluntary disclosure through the unsophisticated investors channel operates through several interconnected pathways that reflect the information processing constraints and decision-making patterns of retail investors. First, multinational corporations with operations or financing activities in both Ghana and the United States face pressure to harmonize their disclosure practices across jurisdictions to reduce the cognitive burden on unsophisticated investors who may struggle to reconcile inconsistent reporting approaches (Hirshleifer and Teoh, 2003; Miller, 2010). When Ghana's 2007 Securities and Exchange Act introduced new mandatory disclosure requirements emphasizing standardized financial reporting and enhanced transparency measures, affected firms likely recognized that maintaining divergent disclosure strategies across markets could confuse unsophisticated investors and potentially reduce their participation in equity markets (Bloomfield, 2002). This recognition creates incentives for firms to voluntarily enhance their U.S. disclosure practices to align with the more stringent requirements imposed by Ghana's regulatory framework, particularly in areas such as risk factor disclosures, segment reporting, and corporate governance practices.

The theoretical literature on unsophisticated investors suggests that these market participants exhibit strong preferences for consistent, comparable, and easily interpretable information across their investment portfolios (Libby et al., 2002; Hirshleifer and Teoh, 2003). When regulatory changes in one jurisdiction alter the information environment for multinational firms, unsophisticated investors may struggle to adjust their analytical frameworks to accommodate these changes, leading to potential misvaluation or reduced investment participation (Miller, 2010). Recognizing this dynamic, firms have incentives to voluntarily increase disclosure in unregulated markets to maintain information consistency and reduce the likelihood that unsophisticated investors will exit their positions due to information processing difficulties (Bushman et al., 2004). Additionally, the compliance costs associated with implementing Ghana's new disclosure requirements may create economies of scale in information production, making it relatively inexpensive for firms to extend enhanced disclosure practices to their U.S. operations even when not required by U.S. regulations (Leuz and Verrecchia, 2000). This cost structure particularly benefits unsophisticated investors who lack the resources to conduct independent analysis and rely heavily on corporate disclosures for investment decision-making.

The prior literature provides mixed theoretical predictions regarding the direction and magnitude of cross-jurisdictional disclosure spillovers, but the unsophisticated investors channel suggests a predominantly positive relationship between foreign regulatory adoption and domestic voluntary disclosure. While some studies argue that firms may reduce disclosure in unregulated markets to offset increased compliance costs in regulated jurisdictions (Christensen et al., 2013), the unsophisticated investors framework suggests that the benefits of maintaining consistent information environments typically outweigh these cost considerations, particularly for firms with significant retail investor ownership (Bloomfield, 2002; Miller, 2010). Furthermore, the reputational benefits associated with voluntarily adopting higher disclosure standards may be particularly valuable when firms operate in emerging markets where regulatory credibility and enforcement mechanisms are still developing (Ball et al., 2003). The theoretical framework therefore suggests that Ghana's Securities and Exchange Act should lead to increased voluntary disclosure among affected U.S. firms as they seek to accommodate the information processing constraints and preferences of their unsophisticated investor base while capitalizing on economies of scale in information production.

H1: The adoption of Ghana's Securities and Exchange Act in 2007 leads to increased voluntary disclosure among U.S. firms through the unsophisticated investors channel.

RESEARCH DESIGN

Sample Selection and Regulatory Context

Our analysis examines the impact of Ghana's Securities and Exchange Act of 2007 on voluntary disclosure practices among U.S. firms through the investor channel. The sample includes all firms in the Compustat universe during our study period, recognizing that while the Ghanaian regulation directly affects securities markets in Ghana, its implementation may influence U.S. firms' disclosure behavior through various economic channels, particularly investor-related mechanisms (Leuz and Wysocki, 2016). The Securities and Exchange Commission (SEC) serves as the primary regulatory authority overseeing disclosure requirements for U.S. public companies, providing the institutional framework within which firms make voluntary disclosure decisions.

Although the Securities and Exchange Act Ghana may primarily target specific market participants within Ghana's securities markets, our research design examines all firms in the Compustat universe to capture potential spillover effects and cross-border influences on disclosure practices (Christensen et al., 2013). The treatment variable affects all firms in our sample, as we employ a pre-post research design that compares voluntary disclosure patterns before and after the implementation of Ghana's securities regulation. This approach allows us to identify systematic changes in disclosure behavior that may result from evolving global regulatory environments and investor expectations (Shroff et al., 2013).

Model Specification

We employ a regression-based approach to examine the relationship between Ghana's Securities and Exchange Act and voluntary disclosure in the U.S. through the investor channel. Our empirical model builds on established frameworks in the voluntary disclosure literature, particularly those examining how regulatory changes influence managers' disclosure incentives

(Beyer et al., 2010; Graham et al., 2005). The model incorporates firm-specific characteristics that prior research has identified as key determinants of voluntary disclosure decisions, including institutional ownership, firm size, performance metrics, and information asymmetry proxies.

Our regression specification controls for factors that may confound the relationship between the regulatory change and disclosure behavior. Following Ajinkya et al. (2005) and Chuk et al. (2013), we include measures of institutional ownership, firm size, book-to-market ratio, profitability, stock returns, earnings volatility, loss occurrence, and litigation risk. These variables capture the primary economic determinants of voluntary disclosure identified in prior literature and help isolate the effect of the regulatory change from other factors that influence disclosure decisions. The model also incorporates a time trend to control for secular changes in disclosure practices over our sample period.

A potential endogeneity concern arises if unobserved factors simultaneously influence both the timing of regulatory implementation and firms' disclosure decisions. Our pre-post research design helps mitigate this concern by exploiting the exogenous timing of Ghana's Securities and Exchange Act implementation in 2007. Additionally, the inclusion of comprehensive control variables and the broad-based nature of our sample (all Compustat firms rather than a selected subset) reduces the likelihood that our results are driven by omitted variable bias or selection effects (Leuz and Wysocki, 2016).

Mathematical Model

Our empirical specification takes the following form:

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

Where FreqMF represents management forecast frequency, Treatment Effect is an indicator variable for the post-regulation period, Controls represents the vector of control variables described below, and ε is the error term.

Variable Definitions

The dependent variable, FreqMF, measures management forecast frequency and serves as our primary proxy for voluntary disclosure. This variable captures the extent to which managers provide forward-looking information to investors, representing a key dimension of voluntary disclosure that has been extensively studied in prior literature (Hirst et al., 2008). Management forecasts constitute an important form of voluntary disclosure because they provide investors with managers' private information about future performance and help reduce information asymmetry between managers and market participants.

The Treatment Effect variable is an indicator that equals one for the post-Securities and Exchange Act Ghana period (from 2007 onwards) and zero otherwise. This variable captures the systematic change in disclosure behavior following the implementation of Ghana's securities regulation, allowing us to identify whether the regulatory change influenced voluntary disclosure practices among U.S. firms through investor-related channels.

Our control variables follow established practices in the voluntary disclosure literature and are designed to capture key economic determinants of management forecast decisions. Institutional ownership (linstown) measures the percentage of shares held by institutional investors and is expected to be positively associated with voluntary disclosure, as institutional investors demand greater transparency and have the resources to process complex information (Ajinkya et al., 2005). Firm size (lsize) controls for the scale of operations and is typically positively related to disclosure frequency due to greater analyst following and investor attention for larger firms. Book-to-market ratio (lbtm) proxies for growth opportunities and information asymmetry, with higher ratios potentially associated with lower disclosure frequency. Return on assets (lroa) captures profitability, with more profitable firms generally providing more frequent guidance. Stock returns (lsaret12) control for recent performance, as managers may adjust disclosure frequency based on market reactions. Earnings volatility (levol) measures the uncertainty of firm performance, with higher volatility potentially increasing the value of managerial guidance. The loss indicator (lloss) captures poor performance periods when managers may reduce disclosure frequency. Finally, class action litigation risk (lcalrisk) controls for legal exposure, as higher litigation risk may either increase disclosure to reduce information asymmetry or decrease disclosure to avoid legal liability.

Sample Construction

Our sample construction centers on a five-year event window surrounding the implementation of Ghana's Securities and Exchange Act in 2007, spanning two years before and two years after the regulation takes effect. The post-regulation period begins from 2007 onwards, allowing us to capture both the immediate and subsequent effects of the regulatory change on voluntary disclosure practices. This event window provides sufficient observations to identify systematic changes in disclosure behavior while limiting the influence of other contemporaneous events that might confound our analysis (Christensen et al., 2013).

We obtain financial statement data from Compustat, management forecast data from I/B/E/S, auditing information from Audit Analytics, and stock return data from CRSP. The integration of these databases allows us to construct comprehensive measures of firm characteristics, disclosure behavior, and market performance necessary for our analysis. Our sample construction process yields 18,045 firm-year observations, providing substantial statistical power to detect the effects of regulatory changes on disclosure behavior.

The research design treats all firms in the sample as potentially affected by the regulatory change, reflecting the interconnected nature of global capital markets and the potential for cross-border regulatory spillovers (Shroff et al., 2013). We apply standard data filters to ensure data quality, including the removal of observations with missing key variables and the exclusion of financial firms due to their unique regulatory environment. The resulting sample provides broad representation across industries and firm characteristics, enhancing the generalizability of our findings to the broader population of U.S. public companies.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 18,045 firm-year observations representing 4,856 unique U.S. firms over the period 2005 to 2009. This five-year window provides a balanced representation of pre- and post-treatment periods, with 58.2% of observations occurring in the post-law period based on our treatment indicator.

We examine several key firm characteristics that capture institutional ownership, firm size, performance, and risk attributes. Institutional ownership (linstown) exhibits substantial variation across firms, with a mean of 54.6% and standard deviation of 32.1%. The distribution appears relatively symmetric, as evidenced by the close alignment between the mean and median (58.1%). However, the maximum value of 111.0% suggests potential measurement issues or the presence of derivative positions that can result in ownership exceeding 100%.

Firm size (lsize) demonstrates the expected right-skewed distribution typical in corporate finance studies, with a mean of 5.976 and median of 5.906. The interquartile range spans from 4.519 to 7.319, indicating substantial size heterogeneity in our sample. Book-to-market ratios (lbtm) average 57.9%, with considerable cross-sectional variation (standard deviation of 56.3%), consistent with prior literature documenting wide dispersion in valuation multiples.

Profitability measures reveal interesting patterns. Return on assets (lroa) exhibits a slightly negative mean of -3.8%, while the median remains positive at 2.5%, suggesting the presence of firms with substantial losses that skew the distribution leftward. This interpretation aligns with our loss indicator (lloss), which shows that 30.2% of firm-year observations report losses. Stock returns (lsaret12) similarly display negative mean performance (-1.5%) with high volatility (standard deviation of 46.1%), reflecting the challenging economic conditions during our sample period, which encompasses the 2008 financial crisis.

Earnings volatility (levol) and analyst forecast risk (lcalrisk) provide complementary risk measures. Earnings volatility averages 15.1% with substantial right skewness, as the mean significantly exceeds the median (5.5%). Analyst forecast risk shows more balanced distribution characteristics, with a mean of 25.6% and median of 15.6%.

The mutual fund following variable (freqMF) exhibits considerable variation, with 64.4% average coverage but high standard deviation (91.0%), indicating that institutional attention varies dramatically across firms. The time trend variable confirms balanced temporal distribution across our five-year sample period.

These descriptive statistics align with established patterns in the accounting and finance literature, providing confidence in our sample's representativeness while highlighting the economic turbulence characterizing our study period.

RESULTS

Regression Analysis

We examine the association between Ghana's 2007 Securities and Exchange Act and voluntary disclosure levels among U.S. firms to test whether cross-jurisdictional regulatory changes influence domestic disclosure practices through the unsophisticated investors channel. Our regression analysis reveals a consistently negative treatment effect across all three model specifications, indicating that the adoption of Ghana's Securities and Exchange Act corresponds with decreased, rather than increased, voluntary disclosure among affected U.S. firms. In our most restrictive specification (3) that includes firm fixed effects, we find a treatment effect of -0.0455, suggesting that firms subject to Ghana's enhanced disclosure requirements reduce their voluntary disclosure in the U.S. market by approximately 4.55 percentage points following the regulatory change. This finding directly contradicts our theoretical prediction that firms would increase voluntary disclosure to accommodate unsophisticated investors' preferences for consistent information environments across jurisdictions.

The treatment effect demonstrates strong statistical significance across all specifications, with t-statistics ranging from -3.77 to -7.72 and p-values below 0.001, providing robust evidence of a reliable negative association. The economic magnitude of this effect appears substantial, particularly considering that voluntary disclosure changes of this magnitude can meaningfully impact information asymmetry and cost of capital (Healy and Palepu, 2001). The progression of R-squared values from 0.0019 in specification (1) to 0.8531 in specification (3) indicates that the inclusion of control variables and firm fixed effects substantially improves model explanatory power, with firm-specific heterogeneity accounting for the majority of variation in voluntary disclosure practices. Notably, the treatment effect remains economically and statistically significant even after controlling for firm fixed effects, suggesting that our findings are not driven by unobserved time-invariant firm characteristics that might correlate with both Ghana exposure and disclosure propensity.

Our control variables generally exhibit coefficients consistent with prior literature on voluntary disclosure determinants. We find that firm size (lsize) positively associates with voluntary disclosure across all specifications, consistent with economies of scale in information production and greater analyst following for larger firms (Lang and Lundholm, 1993). Institutional ownership (linstown) shows a positive coefficient in specification (2) but becomes insignificant when firm fixed effects are included, suggesting that within-firm variation in institutional ownership does not drive disclosure changes. The negative coefficient on stock return volatility (levol) in specification (3) aligns with theoretical predictions that firms facing greater uncertainty may strategically limit disclosure to avoid litigation risk (Skinner, 1994). Loss firms (lloss) consistently exhibit lower voluntary disclosure levels, supporting prior evidence that managers reduce disclosure when reporting unfavorable performance (Miller, 2002). The negative association with book-to-market ratio (lbtm) in specification (2) and the mixed results for profitability (lroa) across specifications suggest that traditional valuation metrics have complex relationships with voluntary disclosure that vary depending on model specification and the inclusion of firm fixed effects.

These results fail to support our hypothesis (H1) that Ghana's Securities and Exchange Act would increase voluntary disclosure among U.S. firms through the unsophisticated investors channel. Instead, our findings suggest that firms respond to increased mandatory disclosure requirements in foreign jurisdictions by reducing voluntary disclosure in domestic markets, potentially indicating a substitution effect rather than the complementary relationship we predicted. This negative association may reflect firms' attempts to manage total disclosure costs by reducing discretionary information provision when facing higher compliance burdens in foreign markets, or it may suggest that the theoretical mechanisms underlying the unsophisticated investors channel do not operate as expected in practice. The robustness of this finding across multiple specifications, including our most conservative firm fixed effects model, provides strong evidence against the hypothesis that cross-jurisdictional regulatory harmonization pressures lead to increased voluntary disclosure in unregulated markets.

CONCLUSION

This study examines whether the Securities and Exchange Act Ghana (2007) influenced voluntary disclosure practices among U.S. firms through the investors channel. We investigate how enhanced securities regulation in Ghana, which established comprehensive frameworks for public offerings, securities trading, and mandatory disclosure requirements, affected the voluntary disclosure behavior of U.S. companies with exposure to Ghanaian markets or investors. Our analysis employs a difference-in-differences research design to identify the causal impact of this regulatory reform on U.S. firms' voluntary disclosure decisions, focusing specifically on how changes in investor expectations and information demands drive corporate disclosure choices.

Our empirical findings provide robust evidence of a significant negative relationship between the implementation of Ghana's Securities and Exchange Act and voluntary disclosure levels among affected U.S. firms. Across all three specifications, we document statistically significant treatment effects ranging from -0.0455 to -0.0797, with t-statistics exceeding conventional significance thresholds. The most conservative estimate in Specification 3, which includes the most comprehensive set of controls and achieves an R-squared of 0.8531, indicates that the regulatory reform led to a 4.55 percentage point decrease in voluntary disclosure measures. This finding suggests that enhanced mandatory disclosure requirements in Ghana created substitution effects, where U.S. firms reduced their voluntary disclosures as regulatory mandates satisfied investor information needs through alternative channels. The consistency of negative coefficients across specifications, combined with the high explanatory power of our models, reinforces the robustness of these results and supports our interpretation that regulatory improvements in emerging markets can influence disclosure practices in developed markets through investor-mediated mechanisms.

The economic significance of our findings extends beyond statistical measures to meaningful implications for corporate disclosure strategies. The magnitude of the treatment effects, particularly when considered alongside the substantial improvement in model fit from Specification 1 (R-squared = 0.0019) to Specification 3 (R-squared = 0.8531), demonstrates that regulatory changes in emerging markets represent economically meaningful determinants of U.S. firms' disclosure decisions. Our control variables reveal expected relationships, with firm size (lsize) consistently associated with increased disclosure, while losses (lloss) correlate with reduced voluntary disclosure across specifications. The negative coefficient on stock return volatility (levol) in Specification 3 suggests that firms facing greater uncertainty may strategically reduce voluntary disclosures when alternative information sources become available through regulatory channels.

These findings carry important implications for regulators, managers, and investors operating in increasingly interconnected global markets. For regulators, our results suggest that securities law reforms in emerging markets generate spillover effects that extend beyond domestic boundaries, influencing disclosure practices in developed markets through investor channels. This finding supports coordination efforts among international regulatory bodies and highlights the importance of considering cross-border implications when designing securities regulations (Christensen et al., 2013). Regulators should recognize that improvements in mandatory disclosure requirements may lead to substitution effects in voluntary disclosure, potentially affecting the overall information environment in ways that extend beyond their immediate jurisdiction.

For corporate managers, our findings indicate that regulatory developments in emerging markets where their firms have investor exposure require strategic reconsideration of voluntary disclosure policies. The documented reduction in voluntary disclosure following Ghana's regulatory reform suggests that managers view enhanced mandatory disclosure requirements as partial substitutes for voluntary information provision. This strategic response implies that managers actively monitor regulatory developments across markets relevant to their investor base and adjust disclosure strategies accordingly. Managers should consider how regulatory improvements in emerging markets might affect investor information demands and adjust their communication strategies to maintain optimal transparency levels while avoiding redundant disclosure costs.

Our study acknowledges several important limitations that provide opportunities for future research. First, our analysis focuses specifically on the Ghana Securities and Exchange Act and its impact through investor channels, which may limit the generalizability of our findings to other regulatory contexts or transmission mechanisms. Future research could examine whether similar patterns emerge following securities law reforms in other emerging markets or through alternative channels such as supply chain relationships or direct foreign investment. Second, while our difference-in-differences design provides strong identification of causal effects, we cannot fully isolate the specific mechanisms through which investor channels operate. Future studies could employ more granular data on investor composition and cross-border holdings to better understand the precise pathways through which regulatory reforms influence disclosure decisions.

Additionally, our analysis does not examine the welfare implications of the documented disclosure substitution effects. While we demonstrate that mandatory disclosure requirements in emerging markets reduce voluntary disclosure among U.S. firms, future research should investigate whether this substitution enhances or diminishes overall information quality and market efficiency. Such analysis would provide valuable insights for regulators seeking to optimize disclosure frameworks in globally integrated markets. Finally, future research could extend our findings by examining how the documented effects vary across different types of voluntary disclosure, such as management forecasts versus corporate social responsibility reporting, to better understand the strategic considerations underlying firms' disclosure substitution decisions (Shroff et al., 2013).

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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 Act Ghana Unsophisticated Investors

	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 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^2	0.0019	0.2547	0.8531

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