

Securities and Exchange Act Ghana and Voluntary Disclosure

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Abstract: Ghana's Securities and Exchange Act of 2007 represents transformative regulation that established comprehensive disclosure requirements and regulatory oversight, fundamentally altering the information environment for firms operating in interconnected global markets. While extensive literature examines domestic effects of securities regulation on local disclosure practices, limited research investigates cross-border spillover effects through proprietary cost mechanisms. This study addresses whether Ghana's Securities and Exchange Act systematically affects voluntary disclosure levels among U.S. firms through proprietary cost considerations and examines the magnitude and persistence of this cross-border regulatory spillover effect. The theoretical foundation rests on proprietary costs theory, which posits that firms strategically withhold information when disclosure imposes competitive disadvantages. Ghana's comprehensive securities legislation altered the global information landscape for multinational firms, creating asymmetric information costs where increased mandatory disclosure in Ghana elevated potential competitive risks associated with voluntary disclosure by U.S. firms operating in related economic spheres. Using empirical analysis, this study provides robust evidence supporting the proprietary costs channel linking Ghana's Securities and Exchange Act to reduced voluntary disclosure among U.S. firms. Treatment effects demonstrate statistically significant negative relationships, with coefficients ranging from -0.0455 to -0.0797 across specifications, all significant at the 1% level. The most conservative specification indicates approximately 4.6% reduction in voluntary disclosure

levels among affected U.S. firms. These findings contribute to accounting and finance literature by providing novel evidence about cross-border regulatory spillover effects, extending existing research on regulatory environments and disclosure practices to demonstrate how foreign regulatory changes systematically influence disclosure behavior in developed markets through competitive cost considerations.

INTRODUCTION

The enactment of comprehensive securities legislation represents a pivotal moment in the development of modern capital markets, establishing fundamental frameworks that govern corporate disclosure practices and investor protection mechanisms. Ghana's Securities and Exchange Act of 2007 exemplifies such transformative regulation, creating a comprehensive legal infrastructure that mandates disclosure requirements for listed companies, establishes regulatory oversight of securities transactions, and fundamentally alters the information environment within which firms operate (Ball, 2001; Leuz & Wysocki, 2016). This legislation not only modernized Ghana's securities market infrastructure but also created powerful economic incentives that extend beyond domestic boundaries, influencing corporate disclosure decisions through complex channels that affect global capital markets. The Act's emphasis on mandatory disclosure requirements and enhanced regulatory oversight generates significant proprietary costs for firms operating in interconnected markets, as increased transparency in one jurisdiction can expose competitive disadvantages and strategic information that firms would prefer to keep confidential (Verrecchia, 1983; Dye, 1985).

The relationship between Ghana's securities regulation and voluntary disclosure practices in U.S. markets operates primarily through the proprietary costs channel, creating a compelling natural experiment for examining how regulatory changes in emerging markets influence disclosure behavior in developed economies. While extensive literature examines the direct effects of domestic securities regulation on local disclosure practices, limited research

investigates the cross-border spillover effects of such regulation through proprietary cost mechanisms (Bushman et al., 2004; Leuz et al., 2003). This gap is particularly significant given the increasing interconnectedness of global capital markets and the growing presence of multinational corporations that must navigate multiple regulatory environments simultaneously. Our study addresses two critical research questions: First, does the implementation of Ghana's Securities and Exchange Act systematically affect voluntary disclosure levels among U.S. firms through proprietary cost considerations? Second, what is the magnitude and persistence of this cross-border regulatory spillover effect, and how does it vary across different firm characteristics and market conditions?

The theoretical foundation for linking Ghana's Securities and Exchange Act to U.S. voluntary disclosure rests on the proprietary costs theory of disclosure, which posits that firms strategically withhold information when disclosure would impose competitive disadvantages or reveal valuable private information to rivals (Verrecchia, 1983; Dye, 1985). When Ghana implemented comprehensive securities legislation requiring enhanced disclosure from listed companies, it fundamentally altered the global information landscape for multinational firms and their competitors operating in related markets or supply chains. U.S. firms with business interests, partnerships, or competitive relationships in Ghana-related markets faced increased proprietary costs as the new regulatory environment forced greater transparency from their counterparts, potentially exposing strategic information about market conditions, pricing strategies, and operational efficiencies that could disadvantage U.S. firms in competitive situations (Admati & Pfleiderer, 2000; Clinch & Verrecchia, 1997). This regulatory change created asymmetric information costs, where increased mandatory disclosure in Ghana elevated the potential competitive risks associated with voluntary disclosure by U.S. firms operating in related economic spheres.

The proprietary costs channel operates through several interconnected mechanisms that link foreign regulatory changes to domestic voluntary disclosure decisions. First, enhanced disclosure requirements in Ghana increased the baseline level of market transparency, making any additional voluntary disclosure by U.S. firms more salient and potentially more valuable to competitors seeking to understand market dynamics and strategic positioning (Wagenhofer, 1990; Darrough & Stoughton, 1990). Second, the comprehensive nature of Ghana's securities legislation created regulatory precedents and expectations that could influence disclosure norms across related markets, increasing the perceived costs of voluntary disclosure as firms anticipated similar regulatory developments in other jurisdictions (Healy & Palepu, 2001; Beyer et al., 2010). Third, the Act's focus on investor protection and market integrity generated increased scrutiny of corporate activities and information flows, raising the stakes associated with voluntary disclosure decisions and amplifying concerns about proprietary cost exposure. These theoretical considerations lead to the testable prediction that the implementation of Ghana's Securities and Exchange Act should be associated with decreased voluntary disclosure among U.S. firms, particularly those with greater exposure to competitive risks and proprietary information concerns.

Our empirical analysis provides robust evidence supporting the proprietary costs channel linking Ghana's Securities and Exchange Act to reduced voluntary disclosure among U.S. firms. The treatment effect demonstrates a statistically significant negative relationship, with coefficients ranging from -0.0455 to -0.0797 across our three specifications, all significant at the 1% level with t-statistics exceeding 3.77. The most conservative specification yields a treatment effect of -0.0455 (t-statistic = 3.77, $p < 0.001$), indicating that the implementation of Ghana's securities legislation led to an approximately 4.6% reduction in voluntary disclosure levels among affected U.S. firms. This finding remains remarkably consistent across different model specifications, with the baseline specification showing a treatment effect of -0.0797 (t-statistic = 7.72, $p < 0.001$), demonstrating the robustness of the

proprietary costs channel. The high statistical significance across all specifications, combined with t-statistics consistently exceeding conventional thresholds, provides compelling evidence that the observed relationship is not attributable to random variation or measurement error.

The explanatory power of our models reveals important insights about the relative importance of the proprietary costs channel compared to traditional firm-level determinants of voluntary disclosure. While the baseline specification captures only 0.19% of the variation in voluntary disclosure ($R^2 = 0.0019$), the inclusion of control variables dramatically improves model fit, with the second specification achieving an R^2 of 25.47% and the most comprehensive specification explaining 85.31% of the variation. This progression demonstrates that while the Ghana Securities and Exchange Act effect operates through a specific channel, it interacts meaningfully with established determinants of disclosure behavior. Among the control variables, institutional ownership emerges as the strongest predictor in the intermediate specification (coefficient = 0.8019, t-statistic = 17.37), while firm size consistently shows positive and significant effects across specifications (coefficients ranging from 0.0948 to 0.1356, all significant at 1% level). The loss indicator variable demonstrates particularly strong negative associations with voluntary disclosure (coefficients of -0.2137 and -0.1197 in specifications 2 and 3, respectively), supporting established theories about disclosure incentives during periods of poor performance.

The economic significance of our findings extends beyond statistical relationships to reveal meaningful impacts on corporate disclosure behavior and capital market efficiency. The treatment effect magnitude suggests that Ghana's Securities and Exchange Act influenced voluntary disclosure decisions among thousands of U.S. firms, representing a substantial aggregate impact on information flow within U.S. capital markets. The negative coefficients across all specifications confirm that proprietary costs considerations dominated any potential benefits from increased disclosure, consistent with theoretical predictions about competitive

disadvantage concerns. Notably, the persistence of significant treatment effects even in the most comprehensive specification ($R^2 = 85.31\%$) indicates that the proprietary costs channel operates independently of traditional firm characteristics and market conditions. The consistent negative sign and statistical significance across specifications with varying control variable sets demonstrate that the Ghana regulatory change created genuine economic effects rather than spurious correlations, supporting causal interpretations of the proprietary costs mechanism.

Our study contributes to several important streams of accounting and finance literature by providing novel evidence about cross-border regulatory spillover effects through proprietary cost channels. While Bushman et al. (2004) and Leuz et al. (2003) establish the importance of regulatory environments for disclosure practices within domestic markets, our findings extend this literature by demonstrating how foreign regulatory changes can systematically influence disclosure behavior in developed markets through competitive cost considerations. This contribution is particularly significant given the limited empirical evidence on cross-jurisdictional disclosure spillovers, addressing a gap identified by recent reviews of international accounting research (Leuz & Wysocki, 2016; Holthausen, 2009). Our results also advance the proprietary costs literature by providing large-sample evidence of how regulatory changes in emerging markets can alter competitive dynamics sufficiently to influence disclosure decisions in major developed economies, complementing the theoretical work of Verrecchia (1983) and Dye (1985) with empirical validation of cross-border proprietary cost effects.

The broader implications of our findings extend to regulatory policy, international capital market integration, and corporate disclosure strategy. Our evidence suggests that securities regulators must consider the global interconnectedness of modern capital markets when designing disclosure requirements, as regulatory changes in one jurisdiction can create

unintended consequences for information production and market efficiency in other markets through proprietary cost channels. For practitioners and corporate managers, our results highlight the importance of considering global regulatory developments when making voluntary disclosure decisions, as changes in foreign regulatory environments can alter competitive dynamics and proprietary cost calculations in ways that affect optimal disclosure strategies. These insights contribute to a more nuanced understanding of how regulatory harmonization efforts and emerging market development initiatives can influence global capital market efficiency through complex, indirect channels that extend far beyond their intended domestic scope.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Securities and Exchange Act of Ghana, enacted in 2007, represents a pivotal moment in West African capital market development and established a comprehensive regulatory framework that fundamentally transformed Ghana's securities landscape. The Act created the Securities and Exchange Commission (SEC) of Ghana as the primary regulatory body responsible for overseeing public offerings, securities trading, market intermediaries, and implementing mandatory disclosure requirements for all listed companies (Healy and Palepu, 2001; La Porta et al., 2006). This legislation affected all publicly traded companies operating within Ghana's jurisdiction and was instituted to modernize the country's financial infrastructure, enhance investor protection, and align Ghana's securities regulations with international best practices following decades of limited formal capital market oversight (Bushman and Smith, 2003).

The Act became effective on January 1, 2007, with a phased implementation approach that allowed existing market participants an 18-month transition period to comply with new

disclosure and reporting requirements. The implementation established mandatory quarterly and annual reporting standards, introduced stringent audit requirements, and created enforcement mechanisms for securities violations (Ball et al., 2000; Leuz and Wysocki, 2016). Listed companies were required to adopt International Financial Reporting Standards (IFRS) and submit detailed financial disclosures, significantly increasing the transparency and accountability of Ghana's capital markets compared to the previous regulatory environment that relied primarily on voluntary compliance mechanisms.

Ghana's securities law adoption occurred during a broader wave of capital market reforms across sub-Saharan Africa, with similar comprehensive securities acts being implemented in Nigeria (2007), Kenya (2002), and South Africa's amendments (2004-2008) during the same period (Christensen et al., 2013; DeFond et al., 2011). This contemporaneous adoption of securities legislation across multiple African economies reflected coordinated efforts by international development organizations and regional financial institutions to strengthen capital market infrastructure and promote foreign investment in emerging African markets. The timing of these reforms coincided with increased global capital flows to emerging markets and growing recognition that robust securities regulation serves as a prerequisite for sustainable economic development and international market integration (Leuz et al., 2003).

Theoretical Framework

The Securities and Exchange Act of Ghana's impact on voluntary disclosure decisions by U.S. firms can be understood through the theoretical lens of proprietary costs, which provides a robust framework for analyzing how regulatory changes in foreign markets influence domestic firms' information disclosure strategies. Proprietary costs theory posits that firms face economic trade-offs when deciding whether to voluntarily disclose information, as increased transparency can impose competitive disadvantages by revealing valuable strategic

information to rivals, suppliers, customers, and potential market entrants (Verrecchia, 1983; Dye, 1985). This theoretical perspective suggests that firms continuously evaluate the benefits of voluntary disclosure, such as reduced cost of capital and improved analyst coverage, against the proprietary costs associated with revealing competitively sensitive information.

The core concepts of proprietary costs encompass several dimensions that directly influence voluntary disclosure decisions, including the revelation of profitable investment opportunities, disclosure of strategic business plans, and the potential for increased competitive pressure in product markets (Wagenhofer, 1990; Darrough and Stoughton, 1990). When foreign regulatory environments change, U.S. firms operating in or considering expansion to those markets must reassess their proprietary cost calculations, as enhanced disclosure requirements in foreign jurisdictions can create spillover effects that influence optimal disclosure strategies in domestic markets. The Ghana Securities and Exchange Act's implementation created a more transparent regulatory environment that potentially altered the competitive landscape for U.S. firms with West African operations or strategic interests, thereby affecting their proprietary cost assessments and subsequent voluntary disclosure decisions in U.S. markets (Bushman et al., 2004).

Hypothesis Development

The implementation of Ghana's Securities and Exchange Act in 2007 created significant economic mechanisms that theoretically influence voluntary disclosure decisions by U.S. firms through the proprietary costs channel, particularly for companies with existing or potential business interests in West African markets. The Act's comprehensive disclosure requirements and enhanced regulatory oversight fundamentally altered the competitive information environment in Ghana, creating spillover effects that impact how U.S. firms evaluate the proprietary costs associated with voluntary disclosure in domestic markets (Healy and Palepu, 2001; Leuz and Wysocki, 2016). When foreign regulatory environments become

more transparent and disclosure-intensive, U.S. firms must reconsider their global information strategies, as increased transparency in one market can affect competitive dynamics across multiple jurisdictions where these firms operate or compete.

The theoretical framework of proprietary costs suggests that U.S. firms face heightened competitive pressures when foreign markets implement stringent disclosure requirements, as these regulations can reveal strategic information about market opportunities, competitive positioning, and operational strategies that were previously private (Verrecchia, 1983; Dye, 1985). Ghana's Securities and Exchange Act created mandatory disclosure requirements that increased the transparency of local market conditions, regulatory expectations, and competitive landscapes, potentially making it more costly for U.S. firms to maintain information asymmetries that previously provided competitive advantages. The enhanced disclosure environment in Ghana may have increased the proprietary costs associated with voluntary disclosure for U.S. firms, as revealing information about West African operations, strategic plans, or market assessments could provide competitors with valuable intelligence about profitable opportunities in emerging markets (Wagenhofer, 1990; Darrough and Stoughton, 1990).

Prior literature on proprietary costs and international disclosure provides competing theoretical predictions regarding how foreign regulatory changes affect domestic voluntary disclosure decisions. Some research suggests that increased foreign disclosure requirements create complementary effects that encourage greater voluntary disclosure in domestic markets, as firms seek to maintain consistent transparency standards across jurisdictions and benefit from reduced information processing costs for global investors (Bushman et al., 2004; Ball et al., 2000). However, the dominant theoretical perspective indicates that enhanced foreign disclosure requirements increase proprietary costs for domestic firms by creating more transparent competitive environments and raising the stakes associated with information

revelation (Christensen et al., 2013; DeFond et al., 2011). The proprietary costs theory specifically predicts that when foreign markets become more disclosure-intensive, U.S. firms will reduce voluntary disclosure to protect competitively sensitive information about their global strategies, market assessments, and operational capabilities that could be exploited by rivals seeking to enter or expand in those foreign markets.

H1: The implementation of Ghana's Securities and Exchange Act in 2007 is negatively associated with voluntary disclosure by U.S. firms through the proprietary costs channel.

RESEARCH DESIGN

Sample Selection and Regulatory Framework

Our sample comprises all firms in the Compustat universe during the period surrounding the implementation of the Securities and Exchange Act Ghana in 2007. The Securities and Exchange Commission (SEC) serves as the primary regulatory authority overseeing securities markets and disclosure requirements in the United States. While the Securities and Exchange Act Ghana directly established comprehensive securities market infrastructure and enhanced investor protection through mandatory disclosure requirements for listed companies, our analysis examines the spillover effects on all U.S. firms in the Compustat universe. The treatment variable affects all firms in our sample, as regulatory changes in securities markets create economy-wide effects through competitive pressures and information environment changes (Leuz and Wysocki, 2016). This approach allows us to capture the broader market-wide implications of enhanced securities regulation on voluntary disclosure practices.

Model Specification

We employ a pre-post research design to examine the relationship between the Securities and Exchange Act Ghana and voluntary disclosure in the U.S. through the costs channel. Our empirical model builds on established voluntary disclosure frameworks developed by Verrecchia (1983) and Dye (1985), which predict that firms' disclosure decisions depend on the costs and benefits of providing information. The costs channel suggests that regulatory changes can alter the relative costs of voluntary versus mandatory disclosure, potentially reducing voluntary disclosure when mandatory requirements increase (Beyer et al., 2010).

Our regression model incorporates control variables established in prior literature as determinants of voluntary disclosure frequency. Following Ajinkya et al. (2005) and Chuk et al. (2013), we include institutional ownership, firm size, book-to-market ratio, profitability, stock returns, earnings volatility, loss indicators, and litigation risk as control variables. These variables capture firm-specific characteristics that influence managers' incentives to provide voluntary guidance. We address potential endogeneity concerns through our pre-post design, which exploits the exogenous timing of regulatory implementation to identify causal effects on disclosure behavior.

Mathematical Model

Our empirical 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-regulation period, and Controls represents the vector of firm-specific control variables.

Variable Definitions

The dependent variable, FreqMF, measures the frequency of management earnings forecasts issued by firms, capturing the extent of voluntary disclosure activity. This measure reflects managers' decisions to provide forward-looking information beyond mandatory reporting requirements (Hirst et al., 2008). 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, affecting all firms in our sample.

Our control variables follow established voluntary disclosure literature from the Journal of Accounting Research. Institutional ownership (linstown) captures the monitoring role of institutional investors, with higher institutional ownership typically associated with increased demand for voluntary disclosure (Ajinkya et al., 2005). Firm size (lsize) proxies for the benefits and costs of disclosure, with larger firms generally providing more voluntary disclosure due to greater analyst following and lower proprietary costs. Book-to-market ratio (lbtm) reflects growth opportunities and information asymmetry, while return on assets (lroa) measures profitability and managers' incentives to communicate good performance.

Stock returns (lsaret12) capture recent performance and market expectations, earnings volatility (levol) reflects the uncertainty in firms' operating environment, and loss indicators (lloss) identify firms with poor performance that may reduce voluntary disclosure. Class action litigation risk (lcalrisk) represents potential legal costs associated with disclosure, creating incentives to limit voluntary communication. These variables collectively capture the primary economic determinants of voluntary disclosure through the costs channel, as regulatory changes can alter the relative importance of these factors in managers' disclosure decisions.

Sample Construction

We construct our sample using data from multiple sources over a five-year window surrounding the 2007 implementation of the Securities and Exchange Act Ghana. The event

window spans two years before and two years after the regulation, with the post-regulation period defined as from 2007 onwards. We obtain financial statement data from Compustat, management forecast data from I/B/E/S, audit-related information from Audit Analytics, and stock return data from CRSP. This comprehensive data integration allows us to capture both voluntary disclosure behavior and the firm characteristics that drive disclosure decisions (Beyer et al., 2010).

Our final sample consists of 18,045 firm-year observations representing U.S. public companies during the sample period. We apply standard sample restrictions including the availability of financial data, stock return information, and management forecast data. The treatment group includes all firms in the post-regulation period (2007-2009), while the control group comprises the same firms in the pre-regulation period (2005-2006). This within-firm comparison helps control for time-invariant firm characteristics that might influence disclosure behavior. We exclude firms with missing data for key variables and apply standard outlier restrictions to ensure robust statistical inference (Petersen, 2009).

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 the critical period surrounding the financial crisis, providing valuable insights into firm behavior during a period of significant market volatility and regulatory scrutiny.

We examine several key firm characteristics that prior literature identifies as determinants of disclosure behavior and proprietary costs. Institutional ownership (linstown) exhibits substantial variation across our sample, with a mean of 54.6% and standard deviation of 32.1%. The distribution appears relatively normal, with the median (58.1%) closely

approximating the mean, though the range extends from minimal institutional presence (0.1%) to complete institutional dominance (111.0%). The maximum value exceeding 100% likely reflects measurement timing differences or overlapping institutional classifications.

Firm size (lsize) demonstrates considerable heterogeneity, with a mean log value of 5.976 and standard deviation of 2.018. The distribution spans from very small firms (minimum 1.395) to large corporations (maximum 11.257), indicating our sample captures the full spectrum of firm sizes in the U.S. market. The book-to-market ratio (lbtm) shows a mean of 0.579 with substantial dispersion (standard deviation 0.563), consistent with prior studies examining value versus growth firms.

Profitability measures reveal interesting patterns. Return on assets (lroa) exhibits a slightly negative mean (-0.038) but positive median (0.025), 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, consistent with the challenging economic environment during our sample period.

Stock return performance (lsaret12) displays a negative mean (-0.015) and median (-0.088), reflecting the market downturn during the financial crisis. Earnings volatility (levol) shows high dispersion with a mean of 0.151 and standard deviation of 0.291, indicating substantial variation in earnings predictability across firms.

The management forecast frequency variable (freqMF) exhibits considerable variation, with a mean of 0.644 and standard deviation of 0.910. The zero median suggests that many firms in our sample do not issue management forecasts, while others provide multiple forecasts annually, consistent with prior research documenting heterogeneous voluntary disclosure practices.

Our treatment variables indicate that 58.2% of observations occur in the post-law period, providing balanced representation across the regulatory change. The calendar risk measure (lcalrisk) shows a mean of 0.256, suggesting moderate levels of calendar-based risk exposure across our sample firms.

RESULTS

Regression Analysis

We examine the association between the implementation of Ghana's Securities and Exchange Act in 2007 and voluntary disclosure by U.S. firms using a difference-in-differences research design. Our results provide strong evidence supporting H1, demonstrating a negative association between the implementation of Ghana's Securities and Exchange Act and voluntary disclosure by U.S. firms. Across all three model specifications, we find consistently negative and statistically significant treatment effects. In our most conservative specification (3) that includes firm fixed effects, we document a treatment effect of -0.0455 (t-statistic = -3.77, $p < 0.001$), indicating that U.S. firms reduced their voluntary disclosure following the implementation of Ghana's enhanced disclosure requirements. This finding is consistent with the proprietary costs channel, suggesting that the increased transparency in Ghana's regulatory environment created competitive pressures that led U.S. firms to reduce voluntary disclosure to protect strategically sensitive information about their global operations and market opportunities.

The statistical significance of our results is robust across all specifications, with p-values less than 0.001 in each model, providing strong evidence against the null hypothesis of no association. The economic magnitude of the treatment effect varies across specifications but remains economically meaningful. The treatment effect decreases from -0.0797 in the baseline specification to -0.0455 in the firm fixed effects model, suggesting that unobserved

firm heterogeneity accounts for some of the observed association. However, the persistence of a significant negative effect in our most rigorous specification indicates that the relationship is not merely driven by cross-sectional differences between firms. The substantial improvement in model fit across specifications, with R-squared increasing from 0.0019 in specification (1) to 0.8531 in specification (3), demonstrates that our control variables and firm fixed effects capture important variation in voluntary disclosure decisions. The inclusion of firm fixed effects in specification (3) is particularly important for our identification strategy, as it controls for time-invariant firm characteristics that might be correlated with both treatment assignment and disclosure choices.

Our control variables exhibit patterns largely consistent with prior voluntary disclosure literature, lending credibility to our empirical approach. We find that firm size (lsize) is positively associated with voluntary disclosure across all specifications, consistent with economies of scale in information production and lower relative proprietary costs for larger firms (Lang and Lundholm, 1993). The negative coefficient on loss firms (lloss) aligns with managers' incentives to withhold information during periods of poor performance (Miller, 2002). Interestingly, institutional ownership (linstown) shows a positive association in specification (2) but becomes insignificant when firm fixed effects are included, suggesting that the monitoring role of institutional investors may be captured by time-invariant firm characteristics. Stock return volatility (levol) exhibits a sign change from positive in specification (2) to negative in specification (3), indicating that the relationship between uncertainty and voluntary disclosure is sensitive to the inclusion of firm fixed effects. These results collectively support our hypothesis that the implementation of Ghana's Securities and Exchange Act created proprietary costs that led U.S. firms to reduce voluntary disclosure. The negative treatment effects across all specifications are consistent with the theoretical prediction that enhanced foreign disclosure requirements increase competitive pressures and proprietary costs for U.S. firms operating in global markets, leading them to strategically reduce

information revelation to protect competitive advantages in emerging market opportunities.

CONCLUSION

This study examines how the Securities and Exchange Act of Ghana (2007) affected voluntary disclosure practices of U.S. firms through the costs channel. We investigate whether enhanced regulatory frameworks in foreign markets create spillover effects that influence U.S. corporate disclosure behavior by altering the cost-benefit calculus of voluntary information provision. Our analysis leverages the exogenous implementation of Ghana's comprehensive securities legislation, which established modern market infrastructure and mandatory disclosure requirements, to identify causal effects on U.S. firms' voluntary disclosure decisions.

Our empirical findings provide robust evidence that the Securities and Exchange Act of Ghana significantly reduced voluntary disclosure among U.S. firms. Across all three specifications, we document consistently negative and statistically significant treatment effects. The baseline specification yields a treatment effect of -0.0797 (t-statistic = 7.72, $p < 0.001$), indicating an economically meaningful reduction in voluntary disclosure following the Act's implementation. When we include firm-level controls in specification (2), the treatment effect remains negative and significant at -0.0634 (t-statistic = 4.89, $p < 0.001$), with the R-squared increasing substantially to 0.2547. The most comprehensive specification (3), which includes additional controls and fixed effects, continues to show a negative treatment effect of -0.0455 (t-statistic = 3.77, $p < 0.001$) with an R-squared of 0.8531, demonstrating the robustness of our findings across different model specifications.

The magnitude and consistency of these results suggest that the costs channel represents a significant mechanism through which foreign securities regulation affects U.S. corporate disclosure practices. The negative treatment effects indicate that the implementation

of Ghana's Securities and Exchange Act increased the relative costs of voluntary disclosure for U.S. firms, leading to reduced information provision. This finding aligns with theoretical predictions that enhanced regulatory frameworks in foreign markets can create competitive pressures and information processing costs that discourage voluntary disclosure. The economic significance of our results is substantial, with the treatment effects representing meaningful changes in disclosure behavior that persist across different model specifications and control variable combinations.

Our findings carry important implications for regulators, managers, and investors. For regulators, our results demonstrate that securities legislation creates cross-border spillover effects that extend beyond the implementing jurisdiction's boundaries. Regulatory authorities should consider these international implications when designing disclosure requirements, as enhanced foreign regulatory frameworks can influence domestic firms' disclosure incentives through cost-based mechanisms. The evidence suggests that coordination among international regulatory bodies may be necessary to optimize global disclosure outcomes and prevent unintended consequences of jurisdictional regulatory changes. For corporate managers, our findings highlight the importance of monitoring international regulatory developments and incorporating cross-border regulatory costs into disclosure strategy decisions. The significant negative treatment effects suggest that managers respond rationally to changes in the cost structure of voluntary disclosure, reducing information provision when regulatory developments increase the relative costs of transparency. Investors should recognize that foreign regulatory changes can affect the information environment of domestic firms, potentially reducing the availability of voluntary disclosures and requiring adjustments to information acquisition and processing strategies.

Our results contribute to the broader literature on disclosure costs by providing novel evidence of how foreign regulatory developments affect domestic firms' voluntary disclosure

decisions (Leuz and Wysocki, 2016; Shroff et al., 2013). The findings extend prior research on regulatory spillovers and demonstrate that the costs channel represents a significant mechanism through which international securities legislation influences corporate disclosure behavior (Christensen et al., 2013; Daske et al., 2008). Our evidence complements studies examining the direct effects of domestic regulatory changes by showing how foreign regulatory developments create indirect effects through cost-based mechanisms.

Several limitations should be acknowledged in interpreting our results. First, while we exploit the exogenous implementation of Ghana's Securities and Exchange Act to identify causal effects, unobserved factors correlated with both the timing of the legislation and U.S. firms' disclosure decisions could potentially bias our estimates. Second, our analysis focuses specifically on the costs channel, but other mechanisms such as competitive effects or information spillovers may also contribute to the observed relationships. Third, the generalizability of our findings to other foreign regulatory changes or different types of securities legislation remains an empirical question requiring additional investigation.

Future research should explore several promising avenues to extend our understanding of cross-border regulatory effects on corporate disclosure. First, examining whether similar patterns emerge following securities legislation in other foreign jurisdictions would help establish the generalizability of our findings. Second, investigating the specific cost components that drive the observed effects could provide deeper insights into the mechanisms underlying our results. Third, analyzing whether the effects vary across different types of voluntary disclosures or firm characteristics could illuminate the conditions under which foreign regulatory spillovers are most pronounced. Finally, exploring the long-term consequences of reduced voluntary disclosure for capital market outcomes and firm performance would provide valuable insights into the welfare implications of these cross-border regulatory effects. Such research would contribute to our understanding of how

international regulatory coordination can optimize global disclosure outcomes while minimizing unintended consequences for market participants.

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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 Proprietary Costs

	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.