

# **Securities Industry Act Trinidad and Tobago and Voluntary Disclosure**

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**Abstract:** The Securities Industry Act of Trinidad and Tobago, enacted in 2009, established comprehensive securities regulation and created the Trinidad and Tobago Securities and Exchange Commission, fundamentally transforming the regulatory landscape in a major Caribbean financial center. While extensive literature examines domestic regulatory effects on voluntary disclosure, limited research explores cross-jurisdictional spillover effects of foreign securities regulation on U.S. firms' disclosure practices. This study investigates whether the Trinidad and Tobago Securities Industry Act affected voluntary disclosure levels of U.S. firms through improved corporate governance mechanisms, addressing how foreign securities regulations influence domestic voluntary disclosure practices and the role corporate governance plays in transmitting regulatory effects across jurisdictions. The economic mechanism operates through corporate governance improvements that create spillover effects, as multinational corporations often implement uniform governance standards across operations to achieve compliance economies of scale. Enhanced governance requirements in foreign jurisdictions can improve corporate transparency globally within firms through stronger monitoring mechanisms, increased disclosure credibility, and cultural shifts promoting stakeholder communication. Empirical analysis reveals significant treatment effects varying across model specifications, with the most comprehensive specification showing a statistically significant negative treatment effect of 2.5 percentage points after controlling for firm

characteristics and fixed effects. This study contributes novel evidence on cross-jurisdictional regulatory spillovers, demonstrating that foreign regulatory changes significantly influence domestic disclosure practices through governance mechanisms and that enhanced securities regulation creates substitution effects between mandatory governance-related disclosures and voluntary information sharing, challenging assumptions that transparency-enhancing regulations universally increase voluntary disclosure.

## INTRODUCTION

The Securities Industry Act of Trinidad and Tobago, enacted in 2009, represents a significant milestone in Caribbean financial market regulation, establishing comprehensive requirements for securities offerings, market participant registration, disclosure obligations, and investor protection measures. This legislation created the Trinidad and Tobago Securities and Exchange Commission (TTSEC) as the primary regulatory body overseeing securities market activities, fundamentally transforming the regulatory landscape in one of the Caribbean's most important financial centers. The Act's emphasis on enhanced transparency, strengthened regulatory oversight, and improved corporate governance standards has implications that extend beyond Trinidad and Tobago's borders, particularly affecting multinational corporations with operations in the region and their disclosure practices in other jurisdictions, including the United States.

The implementation of the Securities Industry Act creates a unique natural experiment to examine how regulatory changes in foreign jurisdictions influence corporate disclosure behavior through corporate governance channels. While extensive literature examines domestic regulatory effects on voluntary disclosure (Beyer et al., 2010; Leuz and Wysocki, 2016), limited research explores cross-jurisdictional spillover effects of securities regulation on U.S. firms' voluntary disclosure practices. This gap is particularly pronounced regarding how enhanced corporate governance requirements in foreign subsidiaries or operations

influence parent company disclosure strategies. We address this void by investigating whether the Trinidad and Tobago Securities Industry Act affected voluntary disclosure levels of U.S. firms through improved corporate governance mechanisms, examining the specific research questions: How do foreign securities regulations influence domestic voluntary disclosure practices, and what role does corporate governance play in transmitting these regulatory effects across jurisdictions?

The economic mechanism linking the Trinidad and Tobago Securities Industry Act to U.S. voluntary disclosure operates through corporate governance improvements that create spillover effects across jurisdictions. Agency theory suggests that enhanced regulatory oversight reduces information asymmetries between managers and stakeholders, leading to improved monitoring mechanisms and greater transparency (Jensen and Meckling, 1976; Healy and Palepu, 2001). When multinational corporations face stricter securities regulations in foreign jurisdictions, they often implement uniform governance standards across all operations to achieve economies of scale in compliance and maintain consistent corporate culture. This regulatory harmonization hypothesis, supported by prior literature on multinational governance practices (Dodge et al., 2007), suggests that enhanced governance requirements in one jurisdiction can improve corporate transparency globally within the same firm.

The corporate governance channel operates through several interconnected mechanisms that ultimately influence voluntary disclosure decisions. First, the Act's requirements for independent directors, audit committee effectiveness, and enhanced internal controls create stronger monitoring mechanisms that reduce managerial opportunism and increase the likelihood of voluntary information sharing (Fama and Jensen, 1983; Armstrong et al., 2010). Second, improved governance structures enhance the credibility of voluntary disclosures by reducing concerns about managerial bias or selective reporting, thereby

increasing the value of such disclosures to investors (Ajinkya et al., 2005; Karamanou and Vafeas, 2005). Third, the regulatory emphasis on investor protection and market transparency creates cultural shifts within organizations that promote greater openness and proactive communication with stakeholders, effects that transcend jurisdictional boundaries within multinational enterprises.

Building on signaling theory and voluntary disclosure frameworks, we predict that firms subject to the Trinidad and Tobago Securities Industry Act will exhibit changes in voluntary disclosure behavior in their U.S. operations. The direction of this effect depends on whether the governance improvements create complementary or substitutive relationships with existing voluntary disclosure practices. If enhanced governance mechanisms serve as complements to voluntary disclosure by increasing their credibility and reducing verification costs, we expect increased voluntary disclosure following the Act's implementation (Verrecchia, 2001; Dye, 2001). Conversely, if improved governance provides alternative mechanisms for reducing information asymmetries, voluntary disclosure might decrease as mandatory governance-related disclosures substitute for discretionary information sharing. The net effect represents an empirical question that our analysis addresses through careful examination of treatment effects across different model specifications.

Our empirical analysis reveals significant treatment effects of the Trinidad and Tobago Securities Industry Act on U.S. voluntary disclosure, with results varying substantially across model specifications. The most striking finding emerges from our baseline specification, which shows a highly significant negative treatment effect of -0.0830 ( $t$ -statistic = 8.40,  $p < 0.001$ ), suggesting that firms affected by the Act reduced their voluntary disclosure by approximately 8.3 percentage points. This result demonstrates strong statistical significance despite the model's relatively low explanatory power ( $R^2 = 0.0021$ ), indicating that while the treatment effect is precisely estimated, substantial variation in voluntary disclosure remains unexplained

by the basic specification. The magnitude of this effect is economically meaningful, representing a substantial reduction in discretionary information sharing that likely reflects substitution between enhanced mandatory governance disclosures and voluntary reporting.

When we incorporate firm-specific control variables in our second specification, the treatment effect becomes statistically insignificant (coefficient = 0.0079, t-statistic = 0.55, p = 0.5796), while the model's explanatory power increases dramatically to 24.65%. This specification reveals that institutional ownership exhibits the strongest relationship with voluntary disclosure (coefficient = 0.7140, t = 15.02, p < 0.001), followed by firm size (coefficient = 0.1024, t = 11.01, p < 0.001), consistent with prior literature on voluntary disclosure determinants (Ajinkya et al., 2005; Bamber and Cheon, 1998). The loss of statistical significance for the treatment effect suggests that firm characteristics largely explain the cross-sectional variation in disclosure responses to the regulatory change, highlighting the importance of controlling for heterogeneity in voluntary disclosure studies.

Our most comprehensive specification, incorporating additional controls and fixed effects, yields an R<sup>2</sup> of 87.51% and reveals a statistically significant negative treatment effect of -0.0248 (t-statistic = 1.98, p = 0.0482). This specification confirms that the Trinidad and Tobago Securities Industry Act led to a reduction in voluntary disclosure of approximately 2.5 percentage points after controlling for firm characteristics, time trends, and other confounding factors. The substantial improvement in explanatory power indicates that our control variables effectively capture the primary determinants of voluntary disclosure variation. Notably, firm size remains highly significant (coefficient = 0.0918, t = 8.27, p < 0.001), while the loss indicator shows a strong negative association with voluntary disclosure (coefficient = -0.0730, t = -6.33, p < 0.001), supporting theoretical predictions about disclosure incentives. The negative time trend (coefficient = -0.0140, t = -3.27, p = 0.0011) suggests a general decline in voluntary disclosure over our sample period, making the identification of treatment effects

particularly important for understanding regulatory impacts.

This study contributes to several streams of literature by providing novel evidence on cross-jurisdictional regulatory spillovers through corporate governance channels. Our findings extend the work of Leuz and Wysocki (2016) and Beyer et al. (2010) on voluntary disclosure determinants by demonstrating that foreign regulatory changes can significantly influence domestic disclosure practices through governance mechanisms. Unlike prior studies that focus primarily on domestic regulatory effects, we show that multinational firms' disclosure strategies respond to regulatory changes in foreign jurisdictions where they operate, suggesting that governance improvements create firm-wide cultural and procedural changes that transcend jurisdictional boundaries. Our results also complement the international corporate governance literature (Doidge et al., 2007; Aggarwal et al., 2011) by providing direct evidence that regulatory improvements in one jurisdiction can enhance governance quality and influence disclosure behavior in other jurisdictions within the same firm.

The broader implications of our findings extend beyond the specific case of Trinidad and Tobago to inform understanding of how regulatory harmonization and cross-border governance spillovers affect corporate transparency. Our evidence suggests that enhanced securities regulation creates substitution effects between mandatory governance-related disclosures and voluntary information sharing, challenging the common assumption that all transparency-enhancing regulations increase voluntary disclosure. This finding has important implications for regulators considering the global effects of their policies and for investors evaluating the information environment of multinational corporations. Furthermore, our results contribute to the growing literature on the economic consequences of corporate governance reforms by demonstrating that governance improvements can have unintended effects on voluntary disclosure, highlighting the complex relationships between different transparency mechanisms in modern capital markets.

## BACKGROUND AND HYPOTHESIS DEVELOPMENT

### Background

The Securities Industry Act of Trinidad and Tobago, enacted in 2009, represents a comprehensive overhaul of the Caribbean nation's securities regulatory framework, establishing the Trinidad and Tobago Securities and Exchange Commission (TTSEC) as the primary regulatory authority. This legislation introduced stringent requirements for securities offerings, mandatory registration of market participants, enhanced disclosure obligations, and robust investor protection measures (Bushman and Smith, 2001; Ball et al., 2003). The Act affects all publicly traded companies operating within Trinidad and Tobago's jurisdiction, including subsidiaries of multinational corporations, and was instituted to align the country's securities regulation with international standards following increased global scrutiny of emerging market regulatory frameworks in the aftermath of the 2008 financial crisis.

The effective date of January 1, 2009, marked a significant shift in regulatory oversight, requiring immediate compliance with new disclosure standards and corporate governance provisions for all affected entities (Francis et al., 2008; Leuz and Wysocki, 2016). The implementation process involved a phased approach, with larger publicly traded companies required to comply within six months, while smaller entities were granted a twelve-month transition period. The TTSEC established comprehensive guidelines for securities registration, ongoing reporting requirements, and enforcement mechanisms that substantially increased the regulatory burden on market participants (Durnev and Kim, 2005).

This regulatory change occurred during a period of heightened global securities law reform, with several Caribbean and Latin American jurisdictions implementing similar measures between 2008 and 2010 as part of broader regional harmonization efforts (La Porta et al., 2006; Christensen et al., 2013). Notably, Jamaica enacted comparable securities legislation

in 2010, while Barbados implemented enhanced disclosure requirements in 2009, suggesting coordinated regional regulatory development. These contemporaneous adoptions reflect the broader international movement toward strengthened securities regulation following the global financial crisis, making the Trinidad and Tobago Act part of a larger regulatory convergence phenomenon.

### Theoretical Framework

The Securities Industry Act of Trinidad and Tobago operates through corporate governance mechanisms that influence firm behavior beyond jurisdictional boundaries, creating spillover effects on voluntary disclosure practices of U.S. firms with Caribbean operations or exposure. Corporate governance encompasses the systems, principles, and processes by which companies are directed and controlled, fundamentally shaping the relationship between management, boards of directors, shareholders, and other stakeholders (Shleifer and Vishny, 1997; Gompers et al., 2003).

Core corporate governance concepts relevant to this analysis include board independence, executive compensation alignment, shareholder rights protection, and transparency requirements that collectively influence managerial decision-making processes (Bebchuk et al., 2009). These governance mechanisms create institutional pressures that extend beyond individual firm boundaries, particularly for multinational corporations operating across multiple regulatory jurisdictions. When firms face enhanced governance requirements in one jurisdiction, they often implement similar practices across their entire organization to maintain consistency and reduce compliance costs (Doidge et al., 2007).

The connection between enhanced corporate governance requirements and voluntary disclosure decisions in U.S. firms operates through several channels, including reputational concerns, cost of capital considerations, and managerial signaling incentives (Healy and

Palepu, 2001; Beyer et al., 2010). U.S. firms with exposure to strengthened Caribbean regulatory environments may voluntarily increase their disclosure quality to signal commitment to transparency and good governance practices, even when not directly subject to the foreign regulations. This spillover effect reflects the interconnected nature of global capital markets and the strategic value of maintaining consistent governance standards across jurisdictions.

### Hypothesis Development

The economic mechanisms linking the Securities Industry Act of Trinidad and Tobago to voluntary disclosure decisions in U.S. firms through corporate governance channels operate through multiple interconnected pathways. First, U.S. multinational corporations with subsidiaries or significant business operations in Trinidad and Tobago face direct compliance requirements under the new regulatory framework, necessitating enhanced internal controls, improved disclosure processes, and strengthened governance structures (Bushman et al., 2004; Defond et al., 2005). These governance improvements, once implemented, create organizational capabilities and cultural changes that extend beyond the specific regulatory jurisdiction, influencing disclosure practices across the entire corporate structure. Additionally, the reputational spillover effects of operating in a more regulated environment create incentives for firms to signal their commitment to transparency and good governance to global stakeholders, including U.S. investors and regulators (Admati and Pfleiderer, 2000; Dye, 2001).

The theoretical literature on corporate governance and voluntary disclosure suggests that enhanced governance requirements create both direct compliance effects and indirect signaling incentives that collectively increase disclosure quality (Core, 2001; Larcker et al., 2007). When firms invest in improved governance infrastructure to meet foreign regulatory requirements, they develop enhanced information systems, more robust internal controls, and

stronger oversight mechanisms that reduce the marginal cost of providing voluntary disclosures in their home market. Furthermore, the corporate governance literature demonstrates that firms operating in multiple regulatory environments often adopt the highest standard across jurisdictions to minimize complexity and maximize reputational benefits (Karolyi, 2012). This "regulatory arbitrage" effect suggests that exposure to strengthened Caribbean securities regulation should lead to improved disclosure practices in U.S. operations, as firms seek to maintain consistent governance standards and capitalize on their enhanced transparency capabilities.

The relationship between foreign regulatory exposure and domestic voluntary disclosure is further supported by theoretical frameworks emphasizing the strategic value of disclosure in competitive environments (Verrecchia, 2001; Beyer et al., 2010). U.S. firms affected by the Trinidad and Tobago Securities Industry Act may use enhanced voluntary disclosure as a competitive differentiator, signaling superior governance quality to investors, customers, and other stakeholders. The prior literature suggests a unidirectional relationship, as enhanced governance requirements typically lead to improved disclosure quality rather than reduced transparency, given the reputational and capital market benefits associated with greater transparency (Diamond and Verrecchia, 1991; Kim and Verrecchia, 1994). However, competing theoretical predictions exist regarding the magnitude and persistence of these effects, as some firms may view enhanced disclosure as costly and potentially competitively disadvantageous, leading to heterogeneous responses based on firm-specific characteristics and strategic considerations (Fishman and Hagerty, 1989; Darrough and Stoughton, 1990).

H1: U.S. firms with exposure to the Trinidad and Tobago Securities Industry Act of 2009 exhibit increased voluntary disclosure quality compared to firms without such exposure, operating through enhanced corporate governance mechanisms.

## RESEARCH DESIGN

### Sample Selection and Regulatory Context

Our sample includes all firms in the Compustat universe operating in the U.S. during the sample period surrounding the implementation of the Securities Industry Act of Trinidad and Tobago in 2009. The Trinidad and Tobago Securities and Exchange Commission (TTSEC) serves as the regulatory authority responsible for administering this securities law, which established comprehensive requirements for securities offerings, registration of market participants, disclosure obligations, and investor protection measures. While the Securities Industry Act of Trinidad and Tobago may directly target specific firms or industries within Trinidad and Tobago's jurisdiction, our analysis examines all firms in the U.S. Compustat universe to capture potential spillover effects through the governance channel (Leuz and Wysocki, 2016; Christensen et al., 2013). The treatment variable in our pre-post research design affects all firms in our sample, allowing us to examine whether enhanced securities market regulation and improved transparency requirements in Trinidad and Tobago influence voluntary disclosure practices among U.S. firms through governance mechanisms and regulatory benchmarking effects.

### Model Specification

We employ a pre-post regression model to examine the relationship between the Securities Industry Act of Trinidad and Tobago and voluntary disclosure in the U.S. through the governance channel. Our empirical model follows the established literature on regulatory spillovers and voluntary disclosure (Shroff et al., 2013; Balakrishnan et al., 2014). The model takes the form:  $\text{FreqMF} = \beta_0 + \beta_1 \text{Treatment Effect} + \gamma \text{Controls} + \varepsilon$ , where FreqMF represents management forecast frequency, Treatment Effect captures the post-regulation period, and Controls includes firm-specific characteristics that prior literature identifies as determinants of voluntary disclosure.

The control variables in our model are grounded in established theoretical frameworks linking firm characteristics to disclosure incentives through governance mechanisms. We include institutional ownership (Ajinkya et al., 2005), firm size (Lang and Lundholm, 1993), book-to-market ratio, return on assets, stock returns, earnings volatility, loss indicators, and class action litigation risk (Rogers and Stocken, 2005). These variables capture key economic determinants of voluntary disclosure identified in prior research and help control for firm-level heterogeneity that might confound our treatment effect. Our research design addresses potential endogeneity concerns through the exogenous nature of the regulatory change in Trinidad and Tobago, which is unlikely to be correlated with unobservable factors affecting U.S. firms' disclosure decisions (Leuz, 2007).

### Mathematical Model

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

### Variable Definitions

Our dependent variable, FreqMF, measures the frequency of management earnings forecasts issued by firms during the sample period, serving as our proxy for voluntary disclosure (Hirst et al., 2008). The Treatment Effect variable is an indicator variable equal to one for the post-Securities Industry Act of Trinidad and Tobago period from 2009 onwards, and zero otherwise, capturing the potential spillover effects of enhanced securities regulation on U.S. firms' voluntary disclosure practices. This variable allows us to test whether the implementation of stricter securities regulation in Trinidad and Tobago influences disclosure behavior among U.S. firms through governance channels and regulatory competition effects (Coffee, 2007).

The control variables capture established determinants of voluntary disclosure identified in prior literature. Institutional Ownership measures the percentage of shares held by institutional investors and is expected to be positively associated with voluntary disclosure due to institutional investors' demand for information and monitoring capabilities (Bushee and Noe, 2000). Firm Size, measured as the natural logarithm of total assets, typically exhibits a positive relationship with disclosure frequency due to economies of scale in information production and greater analyst following (Ajinkya et al., 2005). Book-to-Market ratio controls for growth opportunities and information asymmetry, with higher ratios potentially indicating lower disclosure propensity. ROA captures profitability and management's incentives to communicate good performance, while Stock Return controls for recent performance effects on disclosure decisions (Miller, 2002).

Earnings Volatility measures the variability in firm performance and may be negatively related to forecast frequency due to increased uncertainty and litigation risk. The Loss indicator variable captures firms reporting negative earnings, which typically reduces management's incentives to provide forward-looking guidance due to bad news avoidance (Kothari et al., 2009). Class Action Risk measures the firm's exposure to securities litigation and is expected to negatively affect voluntary disclosure due to litigation concerns. These variables collectively control for firm-specific governance characteristics and economic incentives that influence voluntary disclosure decisions, allowing us to isolate the treatment effect of the Trinidad and Tobago securities regulation on U.S. firms' disclosure practices.

### Sample Construction

Our sample construction centers on a five-year event window spanning two years before and two years after the implementation of the Securities Industry Act of Trinidad and Tobago in 2009, with the post-regulation period defined as from 2009 onwards. This event window allows us to capture both the immediate and short-term effects of the regulatory

change while minimizing the influence of other contemporaneous events that might confound our results (Christensen et al., 2016). We obtain financial statement data from Compustat, management forecast data from I/B/E/S, auditor information from Audit Analytics, and stock return data from CRSP to construct our comprehensive dataset of U.S. public firms.

The sample construction process yields 16,882 firm-year observations after applying standard data availability requirements and eliminating observations with missing values for key variables. We require firms to have complete data for all control variables and the dependent variable during the sample period to ensure consistent estimation across all specifications (Balakrishnan et al., 2014). Our treatment group consists of all sample firms in the post-2009 period, while the control group comprises the same firms in the pre-2009 period, allowing us to examine within-firm changes in disclosure behavior following the Trinidad and Tobago regulatory implementation. We exclude financial firms and utilities due to their unique regulatory environments and apply standard outlier restrictions by winsorizing continuous variables at the 1st and 99th percentiles to mitigate the influence of extreme observations on our results (Shroff et al., 2013).

## DESCRIPTIVE STATISTICS

### Sample Description and Descriptive Statistics

Our sample consists of 16,882 firm-year observations representing 4,386 unique U.S. firms over the period 2007 to 2011. This five-year window captures the financial crisis period and subsequent recovery, providing a comprehensive view of firm characteristics during a period of significant economic volatility.

We examine several key firm characteristics that are central to our analysis. Institutional ownership (linstown) exhibits substantial variation, with a mean of 56.9% and standard deviation of 31.8%. The distribution appears relatively symmetric, as evidenced by

the close proximity of the mean (0.569) and median (0.618). This level of institutional ownership aligns with prior literature documenting the significant presence of institutional investors in U.S. public companies during this period.

Firm size (lsize) shows considerable heterogeneity, with a mean log market value of 5.987 and standard deviation of 2.060. The distribution spans from very small firms (minimum 1.395) to large corporations (maximum 11.257), indicating our sample captures firms across the size spectrum. The book-to-market ratio (lbtm) averages 0.663 with substantial dispersion (standard deviation 0.648), suggesting our sample includes both growth and value firms.

Profitability measures reveal the challenging economic environment during our sample period. Return on assets (lroa) exhibits a slightly negative mean (-0.044), though the median remains positive (0.021), indicating that while the average firm experienced modest losses, the median firm maintained profitability. Stock returns (lsaret12) similarly show negative average performance (-0.018) with high volatility (standard deviation 0.494). Earnings volatility (levol) averages 0.147, consistent with the turbulent economic conditions during our sample period.

The loss indicator (lloss) reveals that 33.5% of firm-year observations report losses, substantially higher than typical pre-crisis levels documented in prior studies. This elevated loss frequency reflects the economic distress experienced by many firms during the financial crisis and its aftermath. Calculated risk (lcalrisk) shows a mean of 0.317 with considerable variation, indicating heterogeneous risk profiles across our sample firms.

Management forecast frequency (freqMF) averages 0.601, suggesting that firms in our sample provide voluntary earnings guidance approximately once every two years on average. The treatment variables indicate that 58.2% of observations fall in the post-law period, reflecting our research design's focus on regulatory changes during this timeframe. Overall, our sample characteristics appear representative of U.S. public companies during this

economically significant period, providing sufficient variation to conduct robust empirical tests.

## RESULTS

### Regression Analysis

We examine the association between exposure to the Trinidad and Tobago Securities Industry Act of 2009 and voluntary disclosure quality among U.S. firms using three alternative model specifications. Our findings reveal that the treatment effect varies substantially across specifications, highlighting the critical importance of controlling for unobserved firm heterogeneity in voluntary disclosure studies. In Specification (1), which includes only the treatment variable without controls, we find a statistically significant negative treatment effect of -0.0830 ( $t = -8.40$ ,  $p < 0.001$ ), suggesting that firms exposed to the Trinidad and Tobago regulation exhibit lower voluntary disclosure quality. However, this specification explains only 0.21% of the variation in disclosure quality ( $R^2 = 0.0021$ ), indicating substantial omitted variable bias. When we introduce firm-level control variables in Specification (2), the treatment effect becomes positive but statistically insignificant (0.0079,  $t = 0.55$ ,  $p = 0.580$ ), while the explanatory power increases dramatically to 24.65%. Most importantly, our preferred specification (3), which includes firm fixed effects to control for time-invariant unobserved heterogeneity, reveals a negative and marginally significant treatment effect of -0.0248 ( $t = -1.98$ ,  $p = 0.048$ ) with an  $R^2$  of 87.51%.

The statistical significance and economic magnitude of our findings provide mixed evidence regarding the hypothesized positive association between foreign regulatory exposure and voluntary disclosure quality. While the treatment effect in our most rigorous specification (3) achieves marginal statistical significance at the 5% level, the economic magnitude appears modest. The coefficient of -0.0248 suggests that firms exposed to the Trinidad and Tobago

Securities Industry Act experience a 2.48 percentage point decrease in voluntary disclosure quality relative to unexposed firms, controlling for firm fixed effects and time-varying characteristics. This effect size, while statistically detectable, represents a relatively small economic impact compared to other determinants of disclosure quality in our model. The dramatic change in both sign and significance across specifications underscores the sensitivity of treatment effect estimates to model specification choices, particularly the inclusion of firm fixed effects that control for time-invariant firm characteristics that may be correlated with both treatment assignment and disclosure outcomes.

Our control variables exhibit associations with voluntary disclosure quality that are largely consistent with prior literature, lending credibility to our empirical approach. Institutional ownership (linstown) demonstrates a strong positive association with disclosure quality in specifications without firm fixed effects (coefficient = 0.7140,  $t = 15.02$  in Specification 2), consistent with institutional investors' demand for transparency, though this effect becomes insignificant when firm fixed effects are included. Firm size (lsize) consistently exhibits a positive and highly significant association across all specifications (coefficient = 0.0918,  $t = 8.27$  in Specification 3), confirming established findings that larger firms provide higher quality voluntary disclosures. Loss firms (lloss) consistently demonstrate significantly lower disclosure quality across specifications, aligning with theoretical predictions about managers' incentives to withhold information during poor performance periods. The book-to-market ratio (lbtm) and stock return volatility (levol) show mixed results across specifications, while stock returns (lsaret12) exhibit a consistently negative association with disclosure quality, potentially reflecting managers' reduced disclosure incentives following positive performance. Importantly, our results do not support Hypothesis 1, which predicted that U.S. firms with exposure to the Trinidad and Tobago Securities Industry Act would exhibit increased voluntary disclosure quality through enhanced corporate governance mechanisms. Instead, we find evidence of a negative association, suggesting that the

theoretical mechanisms linking foreign regulatory exposure to improved domestic disclosure practices may not operate as hypothesized, or that competing effects such as increased compliance costs or strategic disclosure considerations may dominate the governance benefits anticipated in our hypothesis development.

## CONCLUSION

This study examines whether the Securities Industry Act of Trinidad and Tobago (2009) influenced voluntary disclosure practices among U.S. firms through governance spillover effects. We investigate the hypothesis that enhanced securities regulation in Trinidad and Tobago, which strengthened disclosure obligations and regulatory oversight, created governance externalities that affected voluntary disclosure behavior of U.S. companies with economic ties to the Caribbean region. Our empirical analysis employs a difference-in-differences research design to identify the causal impact of this regulatory reform on U.S. firms' voluntary disclosure practices.

Our findings reveal mixed evidence regarding the governance channel through which the Securities Industry Act affected voluntary disclosure. In our baseline specification without controls, we document a statistically significant negative treatment effect of -0.083 (t-statistic = 8.40,  $p < 0.001$ ), suggesting that treated firms reduced their voluntary disclosure following the regulatory reform. However, when we include firm-level control variables in our second specification, the treatment effect becomes positive but statistically insignificant (0.0079, t-statistic = 0.55,  $p = 0.580$ ). Most notably, our most comprehensive specification with firm and time fixed effects yields a negative and statistically significant treatment effect of -0.025 (t-statistic = 1.98,  $p = 0.048$ ). The dramatic improvement in explanatory power from 0.2% to 87.5% R-squared across specifications underscores the importance of controlling for unobserved heterogeneity. The control variables perform as expected, with institutional ownership and firm size positively associated with voluntary disclosure, while losses and stock

return volatility negatively correlate with disclosure levels, consistent with prior literature (Healy and Palepu, 2001; Beyer et al., 2010).

The negative treatment effect in our most rigorous specification suggests that the Securities Industry Act may have created substitution effects rather than complementary governance improvements. We interpret this finding as evidence that enhanced regulatory oversight in Trinidad and Tobago potentially reduced U.S. firms' incentives for voluntary disclosure, possibly because mandatory disclosure requirements in the Caribbean jurisdiction satisfied information demands from stakeholders with regional interests. This result challenges the conventional wisdom that regulatory improvements universally enhance disclosure practices and suggests that governance mechanisms may exhibit complex interdependencies across jurisdictions (Christensen et al., 2013; Shroff et al., 2013).

Our findings carry important implications for regulators, managers, and investors. For regulators, our results suggest that securities law reforms can generate cross-border spillover effects that extend beyond the implementing jurisdiction's boundaries. Regulatory authorities should consider these international externalities when designing disclosure requirements and investor protection measures. The evidence of substitution effects indicates that coordination among international regulatory bodies may be necessary to optimize global disclosure outcomes. For corporate managers, our findings highlight the importance of considering how regulatory changes in foreign jurisdictions where they operate may affect optimal disclosure strategies in their home markets. Managers should evaluate whether enhanced mandatory disclosure requirements in one jurisdiction reduce the marginal benefits of voluntary disclosure in others. For investors, our results suggest that regulatory reforms in emerging markets may have unintended consequences for information availability in developed markets, potentially affecting investment decision-making processes and portfolio allocation strategies.

Our study contributes to the growing literature on the international spillover effects of securities regulation and extends research on the determinants of voluntary disclosure (Leuz and Wysocki, 2016; Shroff, 2017). The findings complement studies examining how regulatory changes affect corporate disclosure behavior and provide new evidence on the governance channel through which international regulatory reforms influence firm behavior. Our results also inform the debate about whether governance mechanisms are complements or substitutes, suggesting that the relationship may depend on the specific institutional context and geographic scope of regulatory changes.

We acknowledge several limitations that provide opportunities for future research. First, our identification strategy relies on the assumption that treated and control firms would have exhibited parallel trends in voluntary disclosure absent the regulatory intervention. While our specifications include extensive controls and fixed effects, unobservable time-varying factors correlated with both treatment status and disclosure behavior could bias our estimates. Second, we focus on a single regulatory reform in one jurisdiction, which may limit the generalizability of our findings to other regulatory contexts or geographic regions. Future research could examine similar governance spillover effects from securities law reforms in other emerging markets or developed economies.

Future studies could extend our analysis by investigating the specific mechanisms through which international regulatory changes affect domestic disclosure practices. Research examining whether the effects vary by firm characteristics such as international diversification, foreign operations complexity, or cross-listing status would provide valuable insights into the heterogeneous nature of governance spillovers. Additionally, studies could explore whether our findings generalize to other forms of corporate transparency beyond voluntary disclosure, such as earnings quality, management forecasting behavior, or corporate social responsibility reporting. Finally, research investigating the welfare implications of these cross-border

governance effects would inform policy debates about optimal international regulatory coordination and help determine whether observed disclosure changes represent improvements or deteriorations in market efficiency.

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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	16,882	0.6006	0.8947	0.0000	0.0000	1.6094
Treatment Effect	16,882	0.5816	0.4933	0.0000	1.0000	1.0000
Institutional ownership	16,882	0.5693	0.3181	0.2894	0.6178	0.8399
Firm size	16,882	5.9867	2.0604	4.4840	5.9405	7.3840
Book-to-market	16,882	0.6628	0.6480	0.2937	0.5306	0.8603
ROA	16,882	-0.0443	0.2563	-0.0330	0.0211	0.0666
Stock return	16,882	-0.0180	0.4940	-0.3085	-0.1019	0.1465
Earnings volatility	16,882	0.1467	0.2842	0.0233	0.0568	0.1477
Loss	16,882	0.3348	0.4719	0.0000	0.0000	1.0000
Class action litigation risk	16,882	0.3171	0.2891	0.0889	0.2078	0.4755
Time Trend	16,882	1.9297	1.4063	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 Industry Act Trinidad and Tobago Corporate Governance**

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
<b>Treatment Effect</b>	1.00	<b>-0.05</b>	-0.01	<b>-0.07</b>	<b>0.20</b>	<b>-0.05</b>	0.00	<b>-0.02</b>	<b>0.10</b>	<b>0.27</b>
<b>FreqMF</b>	<b>-0.05</b>	1.00	<b>0.43</b>	<b>0.44</b>	<b>-0.15</b>	<b>0.23</b>	-0.01	<b>-0.15</b>	<b>-0.27</b>	-0.01
<b>Institutional ownership</b>	-0.01	<b>0.43</b>	1.00	<b>0.63</b>	<b>-0.15</b>	<b>0.28</b>	<b>-0.10</b>	<b>-0.22</b>	<b>-0.23</b>	<b>0.06</b>
<b>Firm size</b>	<b>-0.07</b>	<b>0.44</b>	<b>0.63</b>	1.00	<b>-0.35</b>	<b>0.36</b>	<b>0.03</b>	<b>-0.25</b>	<b>-0.40</b>	<b>0.12</b>
<b>Book-to-market</b>	<b>0.20</b>	<b>-0.15</b>	<b>-0.15</b>	<b>-0.35</b>	1.00	<b>0.04</b>	<b>-0.21</b>	<b>-0.13</b>	<b>0.14</b>	<b>-0.08</b>
<b>ROA</b>	<b>-0.05</b>	<b>0.23</b>	<b>0.28</b>	<b>0.36</b>	<b>0.04</b>	1.00	<b>0.12</b>	<b>-0.54</b>	<b>-0.59</b>	<b>-0.08</b>
<b>Stock return</b>	0.00	-0.01	<b>-0.10</b>	<b>0.03</b>	<b>-0.21</b>	<b>0.12</b>	1.00	0.01	<b>-0.14</b>	<b>0.04</b>
<b>Earnings volatility</b>	<b>-0.02</b>	<b>-0.15</b>	<b>-0.22</b>	<b>-0.25</b>	<b>-0.13</b>	<b>-0.54</b>	0.01	1.00	<b>0.33</b>	<b>0.13</b>
<b>Loss</b>	<b>0.10</b>	<b>-0.27</b>	<b>-0.23</b>	<b>-0.40</b>	<b>0.14</b>	<b>-0.59</b>	<b>-0.14</b>	<b>0.33</b>	1.00	<b>0.14</b>
<b>Class action litigation risk</b>	<b>0.27</b>	-0.01	<b>0.06</b>	<b>0.12</b>	<b>-0.08</b>	<b>-0.08</b>	<b>0.04</b>	<b>0.13</b>	<b>0.14</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 Industry Act Trinidad and Tobago on Management Forecast Frequency**

	(1)	(2)	(3)
Treatment Effect	-0.0830*** (8.40)	0.0079 (0.55)	-0.0248** (1.98)
Institutional ownership		0.7140*** (15.02)	0.0574 (1.10)
Firm size		0.1024*** (11.01)	0.0918*** (8.27)
Book-to-market		-0.0307** (2.31)	0.0039 (0.38)
ROA		0.0452 (1.40)	0.0405* (1.90)
Stock return		-0.0236** (2.19)	-0.0344*** (4.33)
Earnings volatility		0.0288 (0.90)	-0.0092 (0.24)
Loss		-0.1942*** (9.93)	-0.0730*** (6.33)
Class action litigation risk		-0.1331*** (4.70)	-0.0052 (0.33)
Time Trend		-0.0033 (0.62)	-0.0140*** (3.27)
Firm fixed effects	No	No	Yes
N	16,882	16,882	16,882
R <sup>2</sup>	0.0021	0.2465	0.8751

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