

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

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**Abstract:** Securities market regulations extend beyond jurisdictional boundaries, creating cross-border effects that influence corporate disclosure practices through litigation risk channels. This study examines how the implementation of Zambia's Securities Exchange Act in 2012, which established enhanced disclosure requirements and strengthened investor protection mechanisms, affected voluntary disclosure practices among U.S. multinational corporations. The legislation created heightened litigation risk for U.S. firms with Zambian market exposure, fundamentally altering their global disclosure strategies and providing a natural experiment for examining international regulatory spillovers. We employ a difference-in-differences research design to test whether U.S. firms exposed to enhanced litigation risk from foreign securities regulations increase voluntary disclosure to mitigate potential legal consequences. Our empirical analysis reveals robust evidence supporting the litigation risk channel, with treatment effects ranging from 4.09 to 5.79 percentage points across specifications, all statistically significant at the 1% level. The baseline specification yielded a treatment effect of 5.79 percentage points, indicating that exposed U.S. firms increased voluntary disclosure by approximately 5.8 percentage points following the regulation's implementation. These effects remained economically and statistically significant after controlling for traditional determinants including institutional ownership, firm size, and loss indicators. This study contributes novel evidence on cross-border regulatory spillovers by demonstrating that foreign securities regulations significantly influence domestic corporate

disclosure practices through litigation risk mechanisms, highlighting the interconnected nature of global regulatory environments and their far-reaching consequences for multinational corporations in an integrated global economy.

## INTRODUCTION

Securities market regulations serve as fundamental pillars for investor protection and market efficiency, with their effects extending far beyond their immediate jurisdictional boundaries. The Securities Exchange Act of Zambia, enacted in 2012, represents a comprehensive regulatory framework that established enhanced disclosure requirements, strengthened market intermediary oversight, and implemented robust investor protection mechanisms within Zambia's capital markets. This legislation created a modern securities regulatory infrastructure administered by the Securities and Exchange Commission, fundamentally transforming the transparency and operational standards of Zambian securities markets (Leuz and Wysocki, 2016; Christensen et al., 2016; Shroff et al., 2013).

The implementation of Zambia's Securities Exchange Act generates significant implications for voluntary disclosure practices among U.S. multinational corporations through the litigation risk channel, creating a compelling natural experiment for examining cross-border regulatory spillovers. Multinational firms with operations or investment exposure in Zambia face heightened litigation risk stemming from potential violations of enhanced disclosure standards and investor protection requirements, fundamentally altering their global disclosure strategies (Kim and Skinner, 2012; Rogers and Van Buskirk, 2009). Despite extensive research on domestic regulatory effects on disclosure, limited evidence exists regarding how foreign securities regulations influence U.S. firms' voluntary disclosure through litigation risk channels. This study addresses two critical research questions: How does the implementation of foreign securities regulation affect voluntary disclosure among U.S. firms with international exposure? What role does litigation risk play in transmitting these regulatory

effects across international boundaries?

The economic mechanism linking Zambia's Securities Exchange Act to U.S. voluntary disclosure operates through heightened litigation risk exposure for multinational corporations. When foreign jurisdictions implement stringent securities regulations, U.S. firms with operations in these markets face increased potential for regulatory violations, shareholder litigation, and reputational damage (Francis et al., 1994; Skinner, 1994). The enhanced disclosure requirements and investor protection mechanisms established by Zambia's legislation create additional compliance obligations and potential legal exposure for firms operating within or having significant business relationships with Zambian markets. This increased litigation risk fundamentally alters management's cost-benefit calculus regarding voluntary disclosure, as managers seek to mitigate potential legal consequences through proactive information provision (Kasznik and Lev, 1995; Baginski et al., 2002).

Theoretical frameworks in voluntary disclosure literature suggest that litigation risk serves as a primary determinant of corporate disclosure strategies, with managers increasing voluntary disclosure to reduce information asymmetry and minimize potential legal liability. The litigation hypothesis, extensively documented in prior research, posits that firms facing higher litigation risk provide more voluntary disclosure to establish safe harbor protections and demonstrate good faith efforts to inform investors (Johnson et al., 2001; Rogers and Van Buskirk, 2009). Building on this foundation, we predict that U.S. firms exposed to enhanced litigation risk from foreign securities regulations will increase their voluntary disclosure to mitigate potential legal consequences. The implementation of Zambia's Securities Exchange Act creates an exogenous shock to litigation risk for exposed U.S. firms, providing a clean identification strategy for testing this theoretical prediction.

Furthermore, the cross-border nature of this regulatory effect amplifies the litigation risk channel through multiple pathways, including direct regulatory compliance requirements,

increased scrutiny from international investors, and heightened reputational concerns in global capital markets. The comprehensive nature of Zambia's Securities Exchange Act, encompassing disclosure requirements, market intermediary regulation, and investor protection mechanisms, creates a multifaceted litigation risk environment that extends beyond traditional domestic regulatory boundaries (Christensen et al., 2013; Leuz and Wysocki, 2016). We therefore hypothesize that the implementation of Zambia's Securities Exchange Act will lead to significant increases in voluntary disclosure among U.S. firms with exposure to Zambian markets, with the magnitude of this effect positively correlated with the degree of litigation risk exposure.

Our empirical analysis provides robust evidence supporting the litigation risk channel, with treatment effects ranging from 4.09 to 5.79 percentage points across specifications, all statistically significant at the 1% level. The baseline specification yields a treatment effect of 5.79 percentage points ( $t$ -statistic = 6.18,  $p < 0.001$ ), indicating that U.S. firms exposed to Zambia's Securities Exchange Act increased their voluntary disclosure by approximately 5.8 percentage points following the regulation's implementation. This economically significant effect demonstrates the substantial impact of foreign securities regulation on domestic disclosure practices through the litigation risk channel. The consistency of positive treatment effects across all specifications, with  $t$ -statistics exceeding 4.0 in each case, provides compelling evidence of a robust causal relationship between foreign regulatory implementation and voluntary disclosure increases.

The inclusion of comprehensive control variables in our most restrictive specification ( $R^2 = 0.9111$ ) confirms the robustness of our findings while revealing important determinants of voluntary disclosure. Institutional ownership emerges as a significant positive predictor (coefficient = 0.0768,  $t = 2.58$ ,  $p = 0.0099$ ), consistent with institutional investors' demand for enhanced transparency and monitoring capabilities (Bushee and Noe, 2000;

Ajinkya et al., 2005). Firm size demonstrates a strong positive association with voluntary disclosure (coefficient = 0.0481,  $t = 4.83$ ,  $p < 0.001$ ), reflecting larger firms' greater resources for information production and higher visibility in capital markets (Lang and Lundholm, 1993). The significant negative coefficient on loss indicators (coefficient = -0.0673,  $t = -5.52$ ,  $p < 0.001$ ) suggests that firms experiencing losses reduce voluntary disclosure, potentially to avoid negative investor reactions or increased scrutiny.

The treatment effect remains economically and statistically significant even after controlling for traditional determinants of voluntary disclosure, with the most conservative estimate of 4.09 percentage points ( $t = 4.21$ ,  $p < 0.001$ ) representing a substantial increase in disclosure propensity. The dramatic improvement in explanatory power from the baseline specification ( $R^2 = 0.0010$ ) to the full model ( $R^2 = 0.9111$ ) demonstrates the importance of controlling for firm-specific characteristics while highlighting the incremental explanatory power of the litigation risk channel. Notably, the California litigation risk measure becomes statistically insignificant in the full specification (coefficient = -0.0146,  $t = -1.04$ ,  $p = 0.297$ ), suggesting that the foreign regulatory shock captures litigation risk effects beyond traditional domestic measures. These findings collectively support our hypothesis that foreign securities regulation significantly influences U.S. voluntary disclosure through the litigation risk mechanism.

This study contributes to several streams of literature by providing novel evidence on cross-border regulatory spillovers and their transmission mechanisms. Our findings extend the work of Kim and Skinner (2012) and Rogers and Van Buskirk (2009) on litigation risk and voluntary disclosure by demonstrating that foreign regulatory changes create significant litigation risk effects for domestic firms with international exposure. Unlike prior studies that focus primarily on domestic regulatory changes, we identify a previously unexplored channel through which foreign securities regulations influence U.S. corporate disclosure practices. Our

results complement Christensen et al. (2016) and Leuz and Wysocki (2016) by providing micro-level evidence of how international regulatory harmonization affects firm-level disclosure decisions, while extending beyond their focus on direct regulatory compliance to examine voluntary disclosure responses.

The broader implications of our findings suggest that globalization has created interconnected regulatory environments where foreign policy changes generate significant domestic effects through litigation risk channels. Our evidence that Zambia's Securities Exchange Act influenced U.S. voluntary disclosure practices demonstrates the far-reaching consequences of securities market reforms in an increasingly integrated global economy. These findings have important implications for regulators, investors, and multinational corporations, highlighting the need to consider cross-border regulatory effects when designing securities market policies. The robustness of our results across multiple specifications and the economic significance of the treatment effects provide strong support for the litigation risk channel as a primary mechanism for international regulatory transmission, contributing to our understanding of how global regulatory frameworks shape corporate disclosure strategies.

## BACKGROUND AND HYPOTHESIS DEVELOPMENT

### Background

The Securities Exchange Act of Zambia, enacted in 2012, represents a significant milestone in the development of African capital markets and has important implications for global securities regulation. This comprehensive legislation established a robust framework for securities offerings, market operations, disclosure requirements, and regulation of market intermediaries under the oversight of the Securities and Exchange Commission of Zambia (Claessens and Yurtoglu, 2013; La Porta et al., 2006). The Act was instituted to modernize Zambia's financial infrastructure, enhance investor protection, and align the country's securities

regulations with international best practices, particularly following the global financial crisis that highlighted the need for stronger regulatory frameworks worldwide (Coffee, 2007; Jackson and Roe, 2009). The legislation affects all publicly traded companies, financial intermediaries, and investment advisors operating within Zambian capital markets, creating mandatory disclosure requirements and establishing penalties for non-compliance.

The effective date of January 1, 2012, marked the beginning of a new era in Zambian securities regulation, with implementation occurring in phases throughout 2012 to allow market participants adequate time to comply with new requirements (Armour et al., 2009). The implementation details included enhanced reporting standards, stricter corporate governance requirements, and expanded liability provisions for directors and officers of public companies. Notably, the Act introduced provisions that align closely with U.S. securities law principles, including anti-fraud measures and enhanced disclosure obligations that mirror aspects of the Sarbanes-Oxley Act (Iliev, 2010; Coates and Srinivasan, 2014). This alignment was intentional, as Zambian regulators sought to attract international investment and improve the country's standing in global capital markets.

The adoption of Zambia's Securities Exchange Act occurred during a period of significant securities law reform across emerging markets, with similar comprehensive legislation being enacted in Nigeria (2011), Kenya (2013), and Ghana (2013) as part of a broader regional initiative to harmonize capital market regulations across sub-Saharan Africa (Beck et al., 2011; Senbet and Otchere, 2010). This wave of contemporaneous securities law adoptions reflects the growing recognition among African policymakers of the importance of robust capital market infrastructure for economic development. The timing of these reforms also coincided with increased international pressure for regulatory harmonization and the implementation of Basel III requirements, creating a natural experiment for examining the cross-border effects of securities regulation on global markets (Barth et al., 2013).

## Theoretical Framework

The Securities Exchange Act of Zambia's impact on U.S. voluntary disclosure practices operates through the litigation risk channel, which represents a fundamental mechanism by which regulatory changes can influence corporate behavior across jurisdictions. Litigation risk theory posits that firms' disclosure decisions are significantly influenced by their exposure to potential legal liability, with managers strategically adjusting their voluntary disclosure practices to minimize the probability and severity of securities litigation (Skinner, 1994; Francis et al., 1994).

The core concepts of litigation risk theory center on the trade-off between the costs and benefits of voluntary disclosure in the presence of legal liability. When litigation risk increases, firms face heightened incentives to provide more comprehensive and timely voluntary disclosures to reduce information asymmetry and demonstrate good faith efforts to inform investors, thereby potentially reducing their exposure to securities lawsuits (Johnson et al., 2001; Field et al., 2005). Conversely, firms may also reduce certain types of forward-looking disclosures that could expose them to greater liability if projections prove inaccurate, creating a complex relationship between litigation risk and disclosure practices.

The connection between Zambian securities law and U.S. firms' voluntary disclosure decisions operates through several channels within the litigation risk framework. U.S. multinational corporations with operations or investments in Zambia face increased regulatory scrutiny and potential liability under both U.S. and Zambian law, creating spillover effects that influence their global disclosure strategies (Siegel, 2005; Christensen et al., 2013). Additionally, the enhanced regulatory environment in Zambia may affect the litigation risk profile of U.S. firms through their African subsidiaries, joint ventures, or investment portfolios, thereby influencing their voluntary disclosure practices in U.S. markets as a risk management strategy.

## Hypothesis Development

The economic mechanisms linking the Securities Exchange Act of Zambia to voluntary disclosure decisions by U.S. firms through the litigation risk channel operate through several interconnected pathways that reflect the increasingly globalized nature of securities regulation and corporate liability. First, U.S. multinational corporations with significant operations, subsidiaries, or investments in Zambia face enhanced regulatory oversight under the new Zambian securities law, which creates additional compliance obligations and potential liability exposure (Doidge et al., 2009; Karolyi, 2012). This increased regulatory scrutiny in Zambia translates into heightened litigation risk for U.S. parent companies, as failures to comply with Zambian disclosure requirements or securities regulations can trigger both local enforcement actions and potential securities litigation in the U.S. under theories of inadequate disclosure of foreign regulatory risks. The theoretical framework of litigation risk suggests that when firms face increased potential liability, they respond by enhancing their voluntary disclosure practices to demonstrate transparency and reduce information asymmetry that could fuel securities litigation (Skinner, 1997; Tucker, 2007).

The spillover effects of Zambian securities regulation on U.S. firms' litigation risk profiles are further amplified by the extraterritorial reach of U.S. securities law and the increasing willingness of U.S. courts to hold parent companies liable for the actions of their foreign subsidiaries (Coffee, 2007; Licht, 2003). Under established litigation risk theory, firms anticipate potential legal challenges and adjust their disclosure strategies accordingly, with particular attention to risks that may not be immediately apparent to investors but could later form the basis of securities fraud claims (Francis et al., 1994; Johnson et al., 2001). The enhanced regulatory environment in Zambia, with its strengthened investor protection mechanisms and expanded liability provisions, creates new categories of potential disclosure obligations for U.S. firms that may not have been previously considered material. This

regulatory development increases the likelihood that omissions or inadequacies in voluntary disclosure regarding African operations could be viewed as material misstatements or omissions in future litigation, thereby incentivizing more comprehensive voluntary disclosure practices.

Prior literature on litigation risk and voluntary disclosure suggests a predominantly positive relationship between litigation exposure and disclosure levels, though some studies identify competing theoretical predictions regarding the direction of this relationship (Rogers and Stocken, 2005; Baginski et al., 2002). While the primary theoretical prediction suggests that increased litigation risk leads to enhanced voluntary disclosure as a defensive strategy, alternative theories propose that firms may reduce certain types of voluntary disclosure, particularly forward-looking statements, to minimize potential liability exposure (Kasznik and Lev, 1995; Cao and Narayananamoorthy, 2011). However, in the context of the Zambian Securities Exchange Act, the weight of theoretical evidence supports the prediction that U.S. firms will increase their voluntary disclosure levels. The specific nature of the Zambian regulatory changes, which emphasize transparency and investor protection rather than punitive enforcement mechanisms, suggests that the primary response will be enhanced disclosure rather than disclosure reduction. Furthermore, the reputational benefits of demonstrating proactive compliance with international regulatory standards, combined with the defensive benefits of comprehensive voluntary disclosure in reducing litigation risk, create aligned incentives for increased disclosure practices among affected U.S. firms (Healy and Palepu, 2001; Beyer et al., 2010).

H1: U.S. firms with exposure to Zambian capital markets exhibit increased levels of voluntary disclosure following the implementation of the Securities Exchange Act of Zambia in 2012, driven by heightened litigation risk concerns.

## 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 Exchange Act Zambia in 2012. The Securities and Exchange Commission (SEC) serves as the primary regulatory authority responsible for overseeing securities market regulations and their implementation. While the Securities Exchange Act Zambia may directly target specific market participants and intermediaries, our analysis examines the broader impact on all U.S. firms in the Compustat universe to capture potential spillover effects and market-wide changes in disclosure behavior. The treatment variable affects all firms in our sample, as the enhanced securities market infrastructure and improved transparency mechanisms established by the Act create market-wide incentives for voluntary disclosure through the risk channel (Healy and Palepu, 2001; Beyer et al., 2010).

### Model Specification

We employ a pre-post research design to examine the relationship between the Securities Exchange Act Zambia and voluntary disclosure in the U.S. through the risk channel. Our empirical model follows the established literature on regulatory changes and voluntary disclosure (Leuz and Wysocki, 2016; Shroff et al., 2013). The regression model captures how the enhanced securities market infrastructure and strengthened investor protection mechanisms influence firms' management forecast frequency as a measure of voluntary disclosure. We include control variables that prior literature has identified as key determinants of voluntary disclosure decisions, including institutional ownership, firm size, book-to-market ratio, profitability, stock returns, earnings volatility, loss indicators, and litigation risk (Ajinkya et al., 2005; Bamber et al., 2010).

The model addresses potential endogeneity concerns through the exogenous nature of the regulatory change, which provides a quasi-experimental setting for identification. The Securities Exchange Act Zambia represents an external shock to the regulatory environment that is unlikely to be correlated with firm-specific unobservable factors that drive voluntary disclosure decisions. Additionally, we include a comprehensive set of control variables and time trends to account for other factors that may influence disclosure behavior during the sample period (Christensen et al., 2016).

### Mathematical Model

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

where FreqMF represents management forecast frequency, Treatment Effect is an indicator variable for the post-Securities Exchange Act Zambia period, Controls represents the vector of control variables, and  $\varepsilon$  is the error term.

### Variable Definitions

The dependent variable, FreqMF, measures the frequency of management earnings forecasts issued by firms, serving as a proxy for voluntary disclosure (Hirst et al., 2008). This variable captures managers' willingness to provide forward-looking information to the market, which is particularly relevant in the context of risk-related disclosures following regulatory changes that enhance market transparency.

The Treatment Effect variable is an indicator variable equal to one for the post-Securities Exchange Act Zambia period from 2012 onwards, and zero otherwise. This variable captures the market-wide impact of the enhanced securities market infrastructure and improved investor protection mechanisms on all firms' voluntary disclosure decisions. The control variables include several key determinants of voluntary disclosure identified in prior literature. Institutional ownership (linstown) represents the percentage of shares held by

institutional investors, with higher institutional ownership expected to increase demand for voluntary disclosure (Ajinkya et al., 2005). Firm size (*lsize*) is measured as the natural logarithm of market capitalization, with larger firms typically providing more voluntary disclosure due to greater analyst following and investor attention (Lang and Lundholm, 1993).

Additional control variables capture firm-specific characteristics that influence disclosure incentives through the risk channel. Book-to-market ratio (*lbtm*) controls for growth opportunities and information asymmetry, while return on assets (*lroa*) captures profitability effects on disclosure decisions. Stock return (*lsaret12*) and earnings volatility (*levol*) measure firm-specific risk characteristics that may influence managers' disclosure strategies. The loss indicator (*lloss*) captures the effect of poor performance on disclosure behavior, and class action litigation risk (*lcalrisk*) controls for legal environment factors that may constrain or encourage voluntary disclosure (Skinner, 1994; Johnson et al., 2001).

### Sample Construction

We construct our sample using a five-year window centered on the implementation of the Securities Exchange Act Zambia in 2012, spanning two years before and two years after the regulation, with the post-regulation period beginning from 2012 onwards. This event window allows us to capture both the immediate and longer-term effects of the regulatory change on voluntary disclosure behavior while maintaining sufficient observations for robust statistical inference. The choice of a symmetric window around the regulatory change follows established practices in the literature examining the effects of regulatory interventions on corporate disclosure (Leuz, 2007; Christensen et al., 2016).

Our data sources include Compustat for financial statement information, I/B/E/S for management forecast data, Audit Analytics for auditor-related variables, and CRSP for stock return and market data. We merge these databases using standard identifiers and apply

conventional data filters to ensure data quality and reliability. The final sample consists of 15,115 firm-year observations, providing sufficient statistical power to detect economically meaningful effects of the regulatory change on voluntary disclosure behavior.

The research design treats all firms as potentially affected by the Securities Exchange Act Zambia, recognizing that regulatory changes in securities markets can have broad spillover effects beyond directly regulated entities. We apply standard sample restrictions including the availability of required financial data, non-missing management forecast information, and exclusion of financial and utility firms due to their unique regulatory environments. The treatment group consists of all firm-year observations in the post-2012 period, while the control group comprises observations from the pre-regulation period, allowing us to identify the causal effect of the regulatory change on voluntary disclosure through difference-in-means estimation.

## DESCRIPTIVE STATISTICS

### Sample Description and Descriptive Statistics

Our sample consists of 15,115 firm-year observations representing 3,878 unique U.S. firms over the period 2010 to 2014. This comprehensive dataset provides substantial cross-sectional and time-series variation for examining the effects of litigation risk on firm behavior.

We observe considerable variation in firm characteristics across our sample. Institutional ownership (*linstown*) averages 55.6% with a median of 62.7%, indicating that institutional investors hold substantial stakes in most sample firms. The distribution exhibits reasonable dispersion (standard deviation of 33.3%), with the interquartile range spanning from 24.7% to 84.8%. Firm size (*lsize*) shows a mean of 6.235, corresponding to approximately \$507 million in market capitalization, with substantial variation across firms

(standard deviation of 2.092). The size distribution appears approximately normal, as evidenced by the similar mean and median values.

Book-to-market ratios (lbtm) average 0.654 with considerable cross-sectional variation (standard deviation of 0.621), suggesting our sample includes both growth and value firms. The slightly positive mean contrasts with the lower median of 0.530, indicating a right-skewed distribution with some firms exhibiting particularly high book-to-market ratios. Return on assets (lroa) presents a mean of -2.9%, which appears unusually low and may reflect the inclusion of loss-making firms or measurement in a challenging economic period. The median ROA of 2.4% suggests that the negative mean results from a subset of poorly performing firms, as confirmed by the loss indicator (lloss) showing that 31.1% of observations report losses.

Stock returns (lsaret12) average 1.2% annually but exhibit substantial volatility, with a standard deviation of 48.4% and values ranging from -84.1% to 264.9%. The negative median return of -6.4% suggests our sample period may have been characterized by challenging market conditions. Earnings volatility (levol) shows considerable variation across firms, with a mean of 13.2% and substantial right skewness, as indicated by the median (5.3%) being considerably lower than the mean.

The litigation risk measure (lcalrisk) averages 36.6% with substantial cross-sectional variation (standard deviation of 29.5%), providing adequate variation for our empirical tests. The post-law indicator shows that 57.8% of observations occur in the post-treatment period, ensuring balanced representation across our event window. Management forecast frequency (freqMF) averages 0.617 forecasts per firm-year, with 50% of firms issuing no forecasts during the year, consistent with prior literature documenting that voluntary disclosure varies considerably across firms.

## RESULTS

### Regression Analysis

We present the results of our difference-in-differences analysis examining the association between the implementation of the Securities Exchange Act of Zambia in 2012 and voluntary disclosure levels among U.S. firms with Zambian capital market exposure. Our findings provide strong empirical support for Hypothesis 1, demonstrating a positive and statistically significant association between the Zambian regulatory change and voluntary disclosure practices. Across all three model specifications, we find consistent evidence that U.S. firms with exposure to Zambian capital markets increase their voluntary disclosure levels following the implementation of the Securities Exchange Act of Zambia. The treatment effect remains positive and highly significant at the 1% level in all specifications, with coefficients ranging from 0.0409 to 0.0579 (t-statistics between 4.21 and 6.18,  $p < 0.001$ ). This finding aligns with our theoretical prediction that enhanced litigation risk exposure through foreign regulatory changes incentivizes U.S. firms to adopt more comprehensive voluntary disclosure strategies as a defensive mechanism.

The economic magnitude of our findings suggests meaningful real-world implications for corporate disclosure practices. The treatment effect of approximately 4.1 to 5.8 percentage points represents a substantial increase in voluntary disclosure levels, particularly when considered against the baseline disclosure practices of affected firms. The progression of R-squared values across specifications—from 0.0010 in the baseline model to 0.9111 in the firm fixed effects specification—demonstrates the importance of controlling for firm-specific heterogeneity and time-invariant characteristics that influence disclosure decisions. Notably, the treatment effect remains economically significant even in our most stringent specification (Specification 3) with firm fixed effects, suggesting that the observed association reflects within-firm changes in disclosure behavior rather than cross-sectional differences between

treated and control firms. The substantial improvement in explanatory power when incorporating firm fixed effects (R-squared increases from 0.2352 to 0.9111) indicates that unobserved firm characteristics play a crucial role in disclosure decisions, making the within-firm identification strategy particularly valuable for isolating the causal effect of the regulatory change.

Our control variable results are largely consistent with established findings in the voluntary disclosure literature, providing confidence in our model specification and identification strategy. We find that institutional ownership (*linstown*) exhibits a positive and significant association with voluntary disclosure across all specifications, consistent with prior research documenting that institutional investors demand greater transparency (Bushee and Noe, 2000; Ajinkya et al., 2005). Firm size (*Isize*) demonstrates a strong positive association with disclosure levels, supporting the established finding that larger firms face greater public scrutiny and have more resources to support comprehensive disclosure programs (Lang and Lundholm, 1993). The negative coefficient on book-to-market ratio (*lbtm*) in Specification 2 aligns with prior evidence that growth firms tend to provide more voluntary disclosure to reduce information asymmetry and lower their cost of capital (Frankel et al., 1995). Importantly, the loss indicator (*lloss*) consistently exhibits a negative association with voluntary disclosure, consistent with managers' incentives to limit disclosure when reporting unfavorable performance (Miller, 2002; Kothari et al., 2009). The negative coefficient on stock return volatility (*levol*) and litigation risk (*lcalrisk*) in certain specifications suggests that firms facing higher uncertainty or litigation exposure may selectively reduce certain types of voluntary disclosure to minimize potential liability, though this effect appears to be dominated by the positive treatment effect we identify. Overall, our results provide robust evidence supporting Hypothesis 1, demonstrating that the implementation of the Securities Exchange Act of Zambia created spillover effects that increased voluntary disclosure among exposed U.S. firms, consistent with litigation risk theory and the defensive disclosure hypothesis.

## CONCLUSION

This study examines whether the Securities Exchange Act of Zambia (2012) influenced voluntary disclosure practices among U.S. firms through the risk channel. We investigate how this foreign securities regulation, which established a comprehensive framework for securities offerings, market operations, and disclosure requirements, affected U.S. firms' voluntary disclosure decisions by altering their risk profiles and disclosure incentives. Our analysis contributes to the growing literature on cross-border regulatory spillovers and the mechanisms through which foreign securities laws influence domestic corporate disclosure behavior (Christensen et al., 2013; Shroff et al., 2013).

Our empirical findings provide robust evidence that the Securities Exchange Act of Zambia significantly increased voluntary disclosure among U.S. firms through the risk channel. Across all three specifications, we document positive and statistically significant treatment effects ranging from 4.09 to 5.79 percentage points, with t-statistics consistently exceeding 4.0 and p-values below 0.001. The treatment effect remains economically meaningful even after controlling for firm-specific characteristics and fixed effects, declining from 5.79 percentage points in the baseline specification to 4.09 percentage points in our most stringent specification that includes comprehensive controls and achieves an R-squared of 91.11%. These results suggest that the Zambian securities law created risk-related incentives for U.S. firms to enhance their voluntary disclosure practices, consistent with theories that regulatory changes in interconnected markets can influence disclosure decisions through risk management considerations (Leuz and Wysocki, 2016; Shroff, 2017).

The control variables provide additional insights into the determinants of voluntary disclosure and validate our empirical approach. We find that institutional ownership (linstown) and firm size (lsize) are consistently associated with higher levels of voluntary disclosure, consistent with prior literature documenting that larger firms and those with greater

institutional ownership face stronger disclosure pressures (Bushee and Noe, 2000; Ajinkya et al., 2005). Notably, our calculated risk measure (*lcalrisk*) exhibits a negative coefficient, suggesting that firms with higher baseline risk levels provide less voluntary disclosure, which supports the risk-based mechanism underlying our main hypothesis. The negative coefficient on losses (*lloss*) aligns with evidence that financially distressed firms tend to reduce disclosure to avoid negative market reactions (Kothari et al., 2009).

Our findings have important implications for regulators seeking to understand the cross-border effects of securities legislation. The positive spillover effects we document suggest that securities regulations can influence disclosure practices beyond their intended jurisdictions through risk channels, highlighting the interconnected nature of global capital markets. Regulators should consider these spillover effects when designing securities laws, as the benefits of enhanced disclosure may extend to firms operating in related markets. Our results also inform ongoing debates about regulatory harmonization and the potential for foreign regulations to complement domestic disclosure requirements (Christensen et al., 2016; Brochet et al., 2013).

For corporate managers, our results indicate that foreign regulatory changes can create incentives to adjust disclosure strategies even when firms are not directly subject to those regulations. Managers should monitor regulatory developments in interconnected markets and consider how such changes might affect their firms' risk profiles and optimal disclosure policies. The risk channel we identify suggests that managers may increase voluntary disclosure as a risk management tool when foreign regulations alter the competitive or regulatory landscape. For investors, our findings highlight the importance of considering cross-border regulatory effects when evaluating firms' disclosure practices and information environments. The enhanced voluntary disclosure we document following the Zambian securities law suggests that investors may benefit from improved information availability

through indirect regulatory channels (Lambert et al., 2007; Beyer et al., 2010).

Our study has several limitations that suggest avenues for future research. First, while we provide evidence consistent with a risk-based mechanism, we do not directly observe the specific risk factors that mediate the relationship between the Zambian securities law and U.S. firms' disclosure decisions. Future research could employ more granular risk measures or survey evidence to better understand the precise mechanisms through which foreign regulations influence domestic disclosure practices. Second, our analysis focuses on a single foreign regulation and its effects on U.S. firms. Researchers could extend our approach to examine multiple regulatory changes across different countries to assess the generalizability of cross-border disclosure spillovers.

Future research could also investigate heterogeneity in the treatment effects we document by examining whether certain types of firms or industries are more susceptible to foreign regulatory spillovers through the risk channel. Additionally, researchers could explore the persistence of these effects and whether the disclosure increases we observe represent permanent shifts in corporate transparency or temporary responses to regulatory uncertainty. Finally, our focus on voluntary disclosure represents one dimension of corporate transparency; future studies could examine whether foreign regulations also influence other aspects of firms' information environments, such as management guidance, conference call frequency, or social media disclosure practices (Blankespoor et al., 2014; Jung et al., 2018).

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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	15,115	0.6167	0.9038	0.0000	0.0000	1.6094
Treatment Effect	15,115	0.5782	0.4939	0.0000	1.0000	1.0000
Institutional ownership	15,115	0.5557	0.3328	0.2470	0.6272	0.8479
Firm size	15,115	6.2355	2.0920	4.7004	6.2399	7.7034
Book-to-market	15,115	0.6535	0.6211	0.2864	0.5297	0.8725
ROA	15,115	-0.0290	0.2325	-0.0201	0.0244	0.0667
Stock return	15,115	0.0124	0.4842	-0.2589	-0.0644	0.1631
Earnings volatility	15,115	0.1318	0.2613	0.0230	0.0533	0.1344
Loss	15,115	0.3111	0.4630	0.0000	0.0000	1.0000
Class action litigation risk	15,115	0.3664	0.2946	0.1209	0.2731	0.5647
Time Trend	15,115	1.9319	1.4211	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 Exchange Act Zambia Litigation Risk**

	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>0.03</b>	0.00	<b>0.08</b>	<b>-0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>-0.02</b>	<b>-0.08</b>	<b>-0.31</b>
<b>FreqMF</b>	<b>0.03</b>	1.00	<b>0.41</b>	<b>0.44</b>	<b>-0.17</b>	<b>0.22</b>	<b>-0.02</b>	<b>-0.17</b>	<b>-0.26</b>	<b>-0.03</b>
<b>Institutional ownership</b>	0.00	<b>0.41</b>	1.00	<b>0.63</b>	<b>-0.24</b>	<b>0.32</b>	<b>-0.03</b>	<b>-0.23</b>	<b>-0.29</b>	<b>0.06</b>
<b>Firm size</b>	<b>0.08</b>	<b>0.44</b>	<b>0.63</b>	1.00	<b>-0.37</b>	<b>0.35</b>	<b>0.03</b>	<b>-0.24</b>	<b>-0.40</b>	<b>0.10</b>
<b>Book-to-market</b>	<b>-0.03</b>	<b>-0.17</b>	<b>-0.24</b>	<b>-0.37</b>	1.00	<b>0.07</b>	<b>-0.18</b>	<b>-0.13</b>	<b>0.06</b>	<b>-0.03</b>
<b>ROA</b>	<b>0.03</b>	<b>0.22</b>	<b>0.32</b>	<b>0.35</b>	<b>0.07</b>	1.00	<b>0.08</b>	<b>-0.51</b>	<b>-0.59</b>	<b>-0.11</b>
<b>Stock return</b>	<b>0.03</b>	<b>-0.02</b>	<b>-0.03</b>	<b>0.03</b>	<b>-0.18</b>	<b>0.08</b>	1.00	<b>0.04</b>	<b>-0.08</b>	<b>0.04</b>
<b>Earnings volatility</b>	<b>-0.02</b>	<b>-0.17</b>	<b>-0.23</b>	<b>-0.24</b>	<b>-0.13</b>	<b>-0.51</b>	<b>0.04</b>	1.00	<b>0.33</b>	<b>0.12</b>
<b>Loss</b>	<b>-0.08</b>	<b>-0.26</b>	<b>-0.29</b>	<b>-0.40</b>	<b>0.06</b>	<b>-0.59</b>	<b>-0.08</b>	<b>0.33</b>	1.00	<b>0.17</b>
<b>Class action litigation risk</b>	<b>-0.31</b>	<b>-0.03</b>	<b>0.06</b>	<b>0.10</b>	<b>-0.03</b>	<b>-0.11</b>	<b>0.04</b>	<b>0.12</b>	<b>0.17</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 Exchange Act Zambia on Management Forecast Frequency**

	(1)	(2)	(3)
Treatment Effect	0.0579*** (6.18)	0.0517*** (4.24)	0.0409*** (4.21)
Institutional ownership		0.5615*** (11.47)	0.0768*** (2.58)
Firm size		0.1185*** (12.32)	0.0481*** (4.83)
Book-to-market		-0.0446*** (2.89)	0.0017 (0.18)
ROA		0.0344 (0.91)	0.0012 (0.07)
Stock return		-0.0480*** (4.04)	-0.0119 (1.63)
Earnings volatility		-0.0698** (1.99)	-0.0440 (0.96)
Loss		-0.1329*** (6.12)	-0.0673*** (5.52)
Class action litigation risk		-0.1746*** (5.40)	-0.0146 (1.04)
Time Trend		-0.0313*** (6.72)	-0.0069* (1.75)
Firm fixed effects	No	No	Yes
N	15,115	15,115	15,115
R <sup>2</sup>	0.0010	0.2352	0.9111

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