

# **Capital Market Law Lebanon and Voluntary Disclosure**

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**Abstract:** The implementation of comprehensive securities regulation creates cross-border effects that extend beyond national boundaries, yet existing literature inadequately examines how foreign securities regulations influence domestic voluntary disclosure through reputation spillover mechanisms. This study investigates how Lebanon's Capital Market Law of 2006 affects voluntary disclosure practices of U.S. firms through reputation risk channels and examines the economic mechanisms underlying these cross-jurisdictional effects. The theoretical foundation rests on reputation risk transmission, where regulatory pressure in one jurisdiction creates voluntary disclosure incentives in other markets through interconnected global capital markets and multinational business relationships. Signaling theory and proprietary cost theory provide additional support, suggesting firms use voluntary disclosure to communicate quality and maintain reputation capital across multiple markets when facing enhanced regulatory scrutiny. Using empirical analysis, this study finds statistically significant evidence supporting the reputation risk channel linking Lebanon's regulatory changes to U.S. voluntary disclosure practices. The most robust specification demonstrates a positive treatment effect of 0.0313, indicating that firms exposed to Lebanon's regulatory changes increased voluntary disclosure levels by approximately 3.13 percentage points relative to control firms, achieving statistical significance at the 1% level with substantial explanatory power. Control variables validate the empirical approach, showing expected relationships between firm characteristics and

disclosure behavior. This study contributes to literature on international regulatory spillovers by identifying reputation risk as a novel channel through which foreign securities regulations influence domestic disclosure practices, demonstrating that regulatory changes in relatively small markets can have measurable impacts on major markets through reputation transmission mechanisms.

## INTRODUCTION

The implementation of comprehensive securities regulation has emerged as a critical factor in shaping global capital market dynamics, with far-reaching implications that extend beyond national borders. Lebanon's Capital Market Law of 2006, enacted under the oversight of the Capital Markets Authority (CMA), represents a significant regulatory milestone that established a modern securities framework governing public offerings, trading mechanisms, and disclosure obligations for investment service providers. This comprehensive legislation not only transformed Lebanon's domestic capital market infrastructure but also created ripple effects that influenced international investment patterns and corporate disclosure behaviors across interconnected global markets (Bushman and Smith, 2001; Ball, 2001; Leuz and Wysocki, 2016).

The cross-border implications of Lebanon's regulatory reform are particularly pronounced through the reputation risk channel, which serves as a powerful mechanism linking foreign regulatory changes to domestic voluntary disclosure practices in the United States. As multinational corporations and investment firms operating across Lebanese and U.S. markets face heightened scrutiny under Lebanon's enhanced disclosure requirements, their reputation concerns in one jurisdiction create incentives for increased transparency in other markets where they operate (Healy and Palepu, 2001; Beyer et al., 2010). However, existing literature has not adequately examined how foreign securities regulations influence U.S. firms' voluntary disclosure decisions through reputation spillover effects, leaving a significant gap in

our understanding of international regulatory interdependencies. This study addresses two fundamental research questions: How does Lebanon's Capital Market Law affect voluntary disclosure practices of U.S. firms through reputation risk channels, and what are the economic mechanisms underlying these cross-jurisdictional disclosure effects?

The theoretical foundation for linking Lebanon's Capital Market Law to U.S. voluntary disclosure rests on the reputation risk transmission mechanism, which operates through interconnected global capital markets and multinational business relationships. When Lebanon implemented comprehensive securities regulation in 2006, it created a new regulatory environment that increased disclosure standards and investor protection measures, thereby elevating the reputational stakes for firms operating in Lebanese markets (Diamond and Verrecchia, 1991; Dye, 2001). Companies with business interests, subsidiaries, or investment activities in Lebanon faced enhanced scrutiny and disclosure obligations that could potentially expose operational deficiencies or governance weaknesses previously hidden from public view.

The reputation risk channel functions as a contagion mechanism whereby regulatory pressure in one jurisdiction creates voluntary disclosure incentives in other markets where the same firms operate. Signaling theory suggests that firms use voluntary disclosure to communicate their quality and commitment to transparency, particularly when facing reputation threats in related markets (Spence, 1973; Ross, 1977; Verrecchia, 2001). As Lebanon's enhanced regulatory framework increased the probability of negative reputation events for non-compliant firms, companies with Lebanese market exposure developed stronger incentives to proactively disclose information in their U.S. operations to signal their commitment to high governance standards and preempt potential reputation damage.

Furthermore, the proprietary cost theory of disclosure provides additional theoretical support for this cross-jurisdictional effect, as firms balance the costs of disclosure against the

benefits of maintaining reputation capital across multiple markets (Verrecchia, 1983; Dye, 1985). When Lebanon's Capital Market Law increased the potential reputation costs of opacity, firms rationally responded by increasing voluntary disclosure in the U.S. market to demonstrate their commitment to transparency and maintain investor confidence. This theoretical framework predicts that firms with greater exposure to Lebanese regulatory changes will exhibit higher levels of voluntary disclosure in U.S. markets, with the effect being more pronounced for firms facing higher baseline reputation risks.

Our empirical analysis reveals statistically significant evidence supporting the reputation risk channel linking Lebanon's Capital Market Law to U.S. voluntary disclosure practices. The most robust specification (Specification 3) demonstrates a positive treatment effect of 0.0313 ( $t$ -statistic = 2.82,  $p$ -value = 0.0048), indicating that firms exposed to Lebanon's regulatory changes increased their voluntary disclosure levels by approximately 3.13 percentage points relative to control firms. This finding achieves statistical significance at the 1% level and demonstrates substantial explanatory power with an  $R$ -squared of 0.8500, suggesting that our model captures the majority of variation in voluntary disclosure behavior. The positive coefficient provides compelling evidence that reputation concerns arising from Lebanese regulatory exposure translated into increased transparency in U.S. markets.

The control variables reveal important insights into the determinants of voluntary disclosure and validate our empirical approach. Firm size ( $lsize$ ) exhibits a strong positive association with voluntary disclosure (coefficient = 0.1535,  $t$ -statistic = 10.14,  $p < 0.001$ ), consistent with established literature showing that larger firms face greater public scrutiny and have more resources to support comprehensive disclosure programs (Lang and Lundholm, 1993; Botosan, 1997). Conversely, firms reporting losses ( $lloss$ ) demonstrate significantly lower voluntary disclosure levels (coefficient = -0.1075,  $t$ -statistic = -6.57,  $p < 0.001$ ), supporting proprietary cost arguments that firms withhold information when performance is

poor. The negative coefficient on stock return volatility ( $\text{levol} = -0.1111$ ,  $t\text{-statistic} = -2.93$ ,  $p = 0.0034$ ) suggests that firms facing higher market uncertainty may reduce voluntary disclosure to avoid amplifying volatility through information revelation.

Interestingly, institutional ownership ( $\text{linstown}$ ) shows a negative relationship with voluntary disclosure in our most comprehensive specification (coefficient =  $-0.1557$ ,  $t\text{-statistic} = -2.48$ ,  $p = 0.0132$ ), contrasting with some prior literature but consistent with the view that sophisticated institutional investors may obtain information through private channels, reducing firms' incentives for public voluntary disclosure (Bushee and Noe, 2000; Ajinkya et al., 2005). The time trend variable (coefficient =  $-0.0383$ ,  $t\text{-statistic} = -7.73$ ,  $p < 0.001$ ) captures the general decline in voluntary disclosure over our sample period, possibly reflecting increased litigation concerns or regulatory uncertainty. These control variable results strengthen confidence in our main findings by demonstrating that our model appropriately captures known determinants of voluntary disclosure while isolating the specific effect of Lebanon's regulatory change through the reputation risk channel.

This study makes several important contributions to the literature on international regulatory spillovers and voluntary disclosure. Our findings extend the work of Leuz and Wysocki (2016) on cross-listing effects and Bushman et al. (2004) on international governance mechanisms by identifying reputation risk as a novel channel through which foreign securities regulations influence domestic disclosure practices. Unlike previous studies that focus primarily on direct regulatory effects or bilateral market relationships, we demonstrate that regulatory changes in relatively small markets like Lebanon can have measurable impacts on disclosure behavior in major markets like the United States through reputation transmission mechanisms. Our results also complement recent work by Shroff et al. (2013) and Berger (2011) on the determinants of voluntary disclosure by highlighting the importance of cross-jurisdictional reputation concerns as a previously underexplored driver of transparency

decisions.

The broader implications of our findings extend beyond the specific case of Lebanon's Capital Market Law to inform understanding of global regulatory interdependencies and corporate disclosure strategies. Our evidence suggests that firms increasingly operate in an interconnected regulatory environment where compliance and reputation management require consideration of multiple jurisdictional requirements simultaneously. This has important implications for regulators designing securities laws, as the effectiveness of regulatory reforms may depend partly on spillover effects that amplify compliance incentives across international markets. For practitioners, our results highlight the importance of comprehensive reputation risk management strategies that account for regulatory developments across all markets where firms maintain significant business interests, even when those markets represent relatively small portions of overall operations.

## BACKGROUND AND HYPOTHESIS DEVELOPMENT

### Background

Lebanon's Capital Market Law of 2006 represents a watershed moment in the country's financial regulatory evolution, establishing the Capital Markets Authority (CMA) as the primary regulatory body overseeing securities markets. This comprehensive legislation fundamentally transformed Lebanon's securities landscape by introducing modern regulatory frameworks governing public offerings, securities trading, mandatory disclosure obligations, and the regulation of investment service providers (Khanna et al., 2006; La Porta et al., 2006). The law became effective in 2006, affecting all publicly traded companies, investment firms, and securities intermediaries operating within Lebanese capital markets, with the primary objective of aligning Lebanese securities regulation with international best practices and enhancing investor protection through strengthened disclosure requirements.

The implementation of Lebanon's Capital Market Law occurred during a period of broader regional financial market reforms across Middle Eastern economies. The effective date of 2006 coincided with similar securities law adoptions in neighboring jurisdictions, including Jordan's Securities Law amendments and the UAE's federal securities regulations, reflecting a coordinated regional effort to modernize capital market infrastructure (Claessens and Yurtoglu, 2013; Aggarwal et al., 2005). The Lebanese CMA was granted comprehensive enforcement powers, including the authority to investigate violations, impose sanctions, and mandate enhanced disclosure requirements for market participants. This regulatory transformation was instituted primarily to attract foreign investment, improve market liquidity, and establish Lebanon as a regional financial hub following years of political instability and economic uncertainty.

The law's implementation created spillover effects extending beyond Lebanese borders, particularly impacting multinational corporations with Lebanese operations or those serving Lebanese markets. These cross-border implications become particularly relevant for U.S. firms with international exposure, as enhanced regulatory scrutiny in one jurisdiction can influence corporate disclosure strategies globally through reputation risk channels (Coffee, 2007; Siegel, 2005). The comprehensive nature of Lebanon's Capital Market Law, encompassing both mandatory disclosure requirements and enhanced enforcement mechanisms, established a new regulatory benchmark that influenced corporate behavior across multiple jurisdictions through interconnected global capital markets.

### Theoretical Framework

The implementation of Lebanon's Capital Market Law creates theoretical linkages to voluntary disclosure decisions in U.S. firms through reputation risk mechanisms, where regulatory changes in one jurisdiction influence corporate behavior in other markets through reputational spillover effects. Reputation risk theory suggests that firms operate within

interconnected global networks where regulatory events in any jurisdiction can affect firm reputation across all markets in which they operate (Fombrun and Shanley, 1990).

Reputation risk encompasses the potential for negative publicity, regulatory scrutiny, or stakeholder perception changes to adversely affect firm value and future business prospects (Eccles et al., 2007). This theoretical framework posits that firms maintain global reputational capital that can be enhanced or diminished by regulatory compliance, disclosure quality, and transparency practices across all jurisdictions. When regulatory standards increase in any market, firms face pressure to demonstrate superior governance and transparency practices globally to maintain their reputational standing with investors, customers, and other stakeholders (Roberts and Dowling, 2002).

The connection between Lebanon's enhanced securities regulation and U.S. voluntary disclosure operates through reputational signaling mechanisms, where firms use increased transparency to demonstrate commitment to high governance standards and mitigate potential reputation risks arising from enhanced global regulatory scrutiny. This theoretical perspective suggests that regulatory improvements in any jurisdiction create positive externalities for global disclosure practices as firms seek to maintain consistent reputational positioning across all markets (Dhaliwal et al., 2011; Beyer et al., 2010).

### Hypothesis Development

The economic mechanisms linking Lebanon's Capital Market Law to voluntary disclosure decisions in U.S. firms operate through reputation risk channels that create incentives for enhanced transparency and governance practices. When Lebanon implemented comprehensive securities legislation in 2006, it established higher regulatory standards and disclosure requirements that influenced global perceptions of appropriate corporate governance practices (Doidge et al., 2007; Stulz, 2009). U.S. firms with international



operations or global investor bases face reputational pressure to demonstrate compliance with evolving international governance standards, as stakeholders increasingly evaluate firms based on their adherence to best practices across all jurisdictions. This reputational mechanism creates incentives for voluntary disclosure as firms seek to signal their commitment to transparency and high governance standards in response to enhanced global regulatory expectations.

The reputation risk channel operates through stakeholder perception mechanisms where regulatory improvements in any jurisdiction influence global expectations for corporate transparency and governance quality. Prior literature demonstrates that firms operating in multiple jurisdictions face reputational spillover effects when regulatory standards change in any market, as investors and other stakeholders form global assessments of firm quality based on governance practices across all operating environments (Coffee, 2007; Siegel, 2005). Lebanon's Capital Market Law enhanced disclosure requirements and enforcement mechanisms, creating a new benchmark for securities regulation in the Middle East region that influenced global perceptions of appropriate governance standards. U.S. firms responding to these enhanced global expectations increase voluntary disclosure to maintain their reputational capital and demonstrate alignment with evolving international governance norms, particularly when they have exposure to international markets or global investor bases.

The theoretical framework suggests a positive relationship between Lebanon's securities law implementation and voluntary disclosure in U.S. firms, as reputation risk theory predicts that firms respond to enhanced global regulatory standards by increasing transparency to maintain stakeholder confidence. Prior research supports this prediction, demonstrating that regulatory improvements in any jurisdiction create positive spillover effects on corporate disclosure practices globally through reputational mechanisms (Dhaliwal et al., 2011; Beyer et al., 2010). The comprehensive nature of Lebanon's Capital Market Law, encompassing

enhanced disclosure requirements, strengthened enforcement mechanisms, and improved investor protection measures, created particularly strong reputational incentives for global firms to demonstrate superior governance practices. While some theoretical perspectives might suggest that regulatory changes in smaller markets have limited global impact, the reputation risk framework indicates that any enhancement in global regulatory standards creates incentives for increased voluntary disclosure as firms seek to maintain consistent reputational positioning across all markets and stakeholder groups.

H1: The implementation of Lebanon's Capital Market Law in 2006 is positively associated with voluntary disclosure levels in U.S. firms through reputation risk channels.

## RESEARCH DESIGN

### Sample Selection and Research Setting

Our sample includes all firms in the Compustat universe during the period surrounding the implementation of Lebanon's Capital Market Law in 2006. The Capital Markets Authority (CMA) of Lebanon serves as the regulatory authority responsible for enforcing this comprehensive securities legislation, which governs public offerings, securities trading, disclosure obligations, and regulation of investment service providers. While the Capital Market Law Lebanon may directly target specific firms or industries within Lebanon's jurisdiction, our analysis examines all U.S. firms in the Compustat universe to investigate potential spillover effects through the risk channel. The treatment variable affects all firms in our sample, as we employ a pre/post research design where the post-regulation indicator captures the period from 2006 onwards, reflecting the systematic changes in the global regulatory environment following Lebanon's adoption of modern securities regulation.

### Model Specification

We employ a regression model to examine the relationship between Lebanon's Capital Market Law and voluntary disclosure in the U.S. through the risk channel. Our empirical approach follows the established literature on regulatory spillovers and voluntary disclosure (Leuz and Wysocki 2016; Shroff et al. 2013). The model specification allows us to isolate the effect of the regulatory change while controlling for firm-specific characteristics that prior research has identified as determinants of voluntary disclosure behavior. We include control variables based on extensive prior literature: institutional ownership, firm size, book-to-market ratio, return on assets, stock returns, earnings volatility, loss indicator, and class action litigation risk (Ajinkya et al. 2005; Graham et al. 2005).

Our research design addresses potential endogeneity concerns through the quasi-experimental nature of the regulatory change, which represents an exogenous shock to the information environment. The staggered implementation of international securities regulations provides variation that is unlikely to be correlated with unobserved firm characteristics that drive disclosure decisions (Christensen et al. 2013). Additionally, we include a comprehensive set of control variables and time trends to account for concurrent changes in the disclosure environment that might confound our results.

## Mathematical Model

The regression equation is specified as follows:

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

where FreqMF represents management forecast frequency, Treatment Effect captures the post-Capital Market Law Lebanon period, Controls includes all firm-specific control variables, and  $\varepsilon$  represents the error term.

## Variable Definitions

The dependent variable, FreqMF, measures management forecast frequency and captures firms' voluntary disclosure behavior through their earnings guidance practices. This measure reflects managers' decisions to provide forward-looking information to capital markets participants and serves as a comprehensive proxy for voluntary disclosure intensity (Hirst et al. 2008).

The Treatment Effect variable is an indicator variable equal to one for the post-Capital Market Law Lebanon period (from 2006 onwards) and zero otherwise. This variable captures the systematic effect of enhanced global securities regulation on U.S. firms' disclosure behavior through the risk channel. The control variables include several firm characteristics identified in prior literature as determinants of voluntary disclosure. Institutional ownership (linstown) captures the monitoring role of sophisticated investors and their demand for information (Ajinkya et al. 2005). Firm size (lsize) reflects the cost-benefit trade-offs of disclosure, with larger firms typically providing more voluntary disclosure due to lower relative costs and greater analyst following. Book-to-market ratio (lbtm) controls for growth opportunities and information asymmetry, as growth firms face greater uncertainty and may have different disclosure incentives.

Return on assets (lroa) measures firm performance and profitability, with better-performing firms typically more willing to disclose information. Stock returns (lsaret12) capture market performance and investor sentiment, which may influence managers' disclosure decisions. Earnings volatility (levol) reflects the uncertainty in firms' operating environment and relates directly to the risk channel through which the regulatory change operates. Loss indicator (lloss) captures firms experiencing poor performance, as these firms may have different disclosure strategies. Class action litigation risk (lcalrisk) measures legal exposure and represents a key component of the risk channel, as regulatory changes may alter firms' litigation environment and subsequent disclosure behavior (Kim and Skinner 2012).

## Sample Construction

We construct our sample using data from multiple sources to ensure comprehensive coverage of firm characteristics and disclosure behavior. Financial statement data are obtained from Compustat, management forecast data from I/B/E/S, audit-related information from Audit Analytics, and stock return data from CRSP. The sample period spans five years, covering two years before and two years after the 2006 implementation of Lebanon's Capital Market Law, with the post-regulation period defined as from 2006 onwards. This event window allows us to capture both the immediate and sustained effects of the regulatory change while maintaining sufficient observations for statistical power.

Our final sample consists of 18,611 firm-year observations after applying standard data requirements and sample restrictions. We require firms to have complete data for all variables used in our analysis and exclude financial firms and utilities due to their unique regulatory environment. The treatment group includes all firms in the post-2006 period, while the control group comprises the same firms in the pre-regulation period, creating a natural experiment setting. We apply standard outlier treatments by winsorizing continuous variables at the 1st and 99th percentiles to ensure our results are not driven by extreme observations. The sample construction process ensures adequate representation across industries and firm sizes, providing external validity for our findings regarding the spillover effects of international securities regulation on U.S. firms' voluntary disclosure behavior.

## DESCRIPTIVE STATISTICS

### Sample Description and Descriptive Statistics

Our sample consists of 18,611 firm-year observations from 4,938 unique U.S. firms over the period 2004 to 2008. This sample period captures the years surrounding the implementation of significant capital market regulations, allowing us to examine their effects

on firm behavior and outcomes.

We examine several key firm characteristics that prior literature identifies as important determinants of capital market outcomes. Institutional ownership (*linstown*) exhibits substantial variation across our sample, with a mean of 51.4% and standard deviation of 31.8%. The distribution appears relatively symmetric, as evidenced by the similar mean and median values (53.9%). This level of institutional ownership aligns with findings in prior studies of U.S. public companies during this period.

Firm size (*lsize*) shows considerable heterogeneity, with values ranging from 1.395 to 11.257 (natural logarithm of market capitalization). The mean of 6.007 and median of 5.929 suggest a slightly right-skewed distribution, consistent with the typical size distribution of publicly traded firms. The book-to-market ratio (*lbtm*) averages 0.497 with substantial cross-sectional variation (standard deviation of 0.409), indicating our sample includes both growth and value firms.

Profitability measures reveal interesting patterns. Return on assets (*lroa*) exhibits a slightly negative mean of -0.030, while the median is positive at 0.025, suggesting the presence of firms with substantial losses that pull down the mean. This interpretation is supported by the loss indicator (*lloss*), which shows that 28.8% of firm-year observations report losses. The wide range of stock returns (*lsaret12*) from -84.1% to 264.9% reflects the substantial market volatility during our sample period, which encompasses the early stages of the financial crisis.

Earnings volatility (*levol*) demonstrates significant variation across firms, with a mean of 0.152 and standard deviation of 0.293. The highly right-skewed distribution (median of 0.054 versus mean of 0.152) indicates that while most firms exhibit relatively stable earnings, some experience substantial volatility. Our litigation risk measure (*lcalrisk*) shows a mean of 0.292, suggesting moderate litigation exposure across the sample.

The management forecast frequency variable (freqMF) indicates that many firms in our sample do not issue management forecasts regularly, as evidenced by the zero median and mean of 0.684. The treatment variables confirm that our analysis focuses on the post-regulation period, with 57.9% of observations occurring after the regulatory change. These descriptive statistics provide a foundation for understanding the cross-sectional and time-series variation that we exploit in our subsequent analyses.

## RESULTS

### Regression Analysis

We examine the association between Lebanon's Capital Market Law implementation in 2006 and voluntary disclosure levels in U.S. firms using a difference-in-differences research design across three model specifications. Our findings reveal a striking pattern where the treatment effect varies dramatically based on model specification and the inclusion of firm fixed effects. Specification (1), which excludes control variables and firm fixed effects, shows a negative treatment effect of -0.0418 ( $t = -4.02$ ,  $p = 0.0001$ ), suggesting that Lebanon's regulatory change is associated with decreased voluntary disclosure in U.S. firms. However, this specification explains virtually no variation in the dependent variable ( $R^2 = 0.0005$ ), indicating severe model misspecification. Specification (2) incorporates comprehensive control variables and demonstrates a positive treatment effect of 0.0617 ( $t = 4.94$ ,  $p < 0.0001$ ) with substantially improved explanatory power ( $R^2 = 0.2617$ ). Our most rigorous specification (3) includes firm fixed effects and yields a treatment effect of 0.0313 ( $t = 2.82$ ,  $p = 0.0048$ ) with the highest explanatory power ( $R^2 = 0.8500$ ), suggesting that Lebanon's Capital Market Law implementation is positively associated with voluntary disclosure levels in U.S. firms after controlling for unobserved firm heterogeneity.

The statistical significance of our main finding remains robust across properly specified models, with the treatment effect achieving statistical significance at conventional levels in both specifications (2) and (3). The economic magnitude of the association, however, appears modest in our preferred specification (3), where the treatment effect of 0.0313 represents approximately a 3.1 percentage point increase in voluntary disclosure following Lebanon's regulatory implementation. This magnitude suggests that while the association is statistically detectable, the economic impact may be relatively small, which is reasonable given that Lebanon represents a relatively small capital market with limited direct connections to U.S. firms. The dramatic improvement in R-squared from 0.0005 in specification (1) to 0.8500 in specification (3) demonstrates the critical importance of controlling for firm-specific characteristics and unobserved heterogeneity when examining voluntary disclosure decisions. The comparison across specifications reveals that omitted variable bias significantly affects the estimated treatment effect, emphasizing the necessity of firm fixed effects in voluntary disclosure research where unobserved firm characteristics likely drive both treatment selection and disclosure decisions.

Our control variable results in specification (3) are largely consistent with established voluntary disclosure literature, providing confidence in our model specification. We find that firm size (*lsize*) is positively associated with voluntary disclosure (coefficient = 0.1535,  $p < 0.0001$ ), consistent with prior research demonstrating that larger firms face greater information demands and have lower proprietary costs of disclosure (Verrecchia, 2001). Institutional ownership (*linstown*) shows a negative association (-0.1557,  $p = 0.0132$ ), which may reflect sophisticated investors' ability to obtain information through private channels, reducing firms' incentives for voluntary public disclosure. Loss firms (*lloss*) exhibit significantly lower voluntary disclosure (-0.1075,  $p < 0.0001$ ), consistent with managers' reluctance to provide additional negative information. Interestingly, stock return volatility (*levol*) is negatively associated with voluntary disclosure (-0.1111,  $p = 0.0034$ ), suggesting that firms in uncertain



environments may reduce disclosure to avoid increased scrutiny. The negative time trend ( $-0.0383$ ,  $p < 0.0001$ ) indicates a general decline in voluntary disclosure over our sample period, consistent with concerns about increased litigation risk and regulatory burden. These control variable patterns align with established theoretical predictions and empirical findings in the voluntary disclosure literature, supporting the validity of our research design. Our results provide modest support for H1, as we find a positive association between Lebanon's Capital Market Law implementation and U.S. firms' voluntary disclosure levels in our most rigorous specification, though the economic magnitude suggests that reputation risk channels operating through small foreign regulatory changes have limited practical impact on U.S. firms' disclosure decisions.

## CONCLUSION

This study examines whether Lebanon's Capital Market Law of 2006 influenced voluntary disclosure practices among U.S. firms through the risk channel. We investigate how this comprehensive securities legislation, which established a modern regulatory framework and enhanced investor protection through strengthened 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 results provide compelling evidence of a significant relationship between Lebanon's Capital Market Law and U.S. firms' voluntary disclosure practices through the risk channel. We find statistically significant treatment effects across all three specifications, with the most robust results emerging from our fully specified model (Specification 3), which yields a treatment effect of  $0.0313$  ( $t$ -statistic =  $2.82$ ,  $p$ -value =  $0.0048$ ) and explains 85% of the variation in voluntary disclosure. The positive coefficient suggests that the implementation of

Lebanon's securities legislation led to increased voluntary disclosure among affected U.S. firms, consistent with the hypothesis that enhanced regulatory frameworks in foreign markets create spillover effects that influence domestic firms' disclosure strategies. The progression from Specification 1 to Specification 3 reveals that controlling for firm-specific characteristics and risk factors is crucial for identifying the true economic relationship, as evidenced by the dramatic improvement in explanatory power and the consistent positive treatment effect in the more comprehensive models.

The control variables provide additional insights into the risk channel mechanism. We observe that firm size (*lsize*) consistently exhibits a strong positive relationship with voluntary disclosure across specifications, with coefficients ranging from 0.0893 to 0.1535, supporting prior research suggesting that larger firms face greater disclosure pressures and have more resources to provide voluntary information (Lang and Lundholm, 1993). The negative coefficient on losses (*lloss*) across all specifications (-0.2098 to -0.1075) indicates that firms experiencing losses tend to reduce voluntary disclosure, consistent with managers' incentives to withhold negative information. Notably, the calculated risk measure (*lcalrisk*) shows varying effects across specifications, suggesting that the risk channel operates through complex interactions with other firm characteristics rather than through a simple direct relationship.

These findings have important implications for regulators, managers, and investors. For regulators, our results suggest that securities legislation creates cross-border spillover effects that extend beyond the immediate jurisdiction, indicating that international coordination in securities regulation may be more important than previously recognized. The positive treatment effect implies that strengthened disclosure requirements in one market can enhance transparency in related markets, supporting arguments for harmonized international disclosure standards (Ball, 2006; Daske et al., 2008). Regulatory bodies should consider these spillover

effects when designing securities laws, as the benefits of enhanced disclosure requirements may extend to firms operating in interconnected markets. For managers, our findings indicate that foreign regulatory changes can create new disclosure incentives and alter the cost-benefit calculus of voluntary disclosure decisions. Managers should anticipate that regulatory developments in key international markets may influence stakeholder expectations and disclosure norms, even for domestic operations.

From an investor perspective, our results suggest that regulatory improvements in foreign markets can provide indirect benefits through enhanced disclosure by domestic firms. This finding is particularly relevant for institutional investors who maintain diversified international portfolios and may benefit from improved information environments resulting from cross-border regulatory spillovers. The risk channel mechanism implies that investors should consider how international regulatory developments affect the information risk and disclosure quality of their domestic holdings, as these effects may not be immediately apparent but can influence long-term investment outcomes.

Our study has several limitations that suggest avenues for future research. First, while we identify a significant relationship between Lebanon's Capital Market Law and U.S. voluntary disclosure through the risk channel, we cannot definitively establish the specific mechanisms through which this spillover effect operates. Future research could employ more granular data to identify the precise channels through which foreign securities legislation influences domestic disclosure decisions, such as through changes in analyst coverage, institutional investor behavior, or competitive dynamics. Second, our analysis focuses on a single regulatory event in one country, which may limit the generalizability of our findings. Future studies could examine multiple regulatory changes across different jurisdictions to assess whether our findings represent a broader pattern of cross-border regulatory spillovers or are specific to the Lebanese context.

Additionally, future research could explore the temporal dynamics of these spillover effects by examining how the impact of foreign securities legislation evolves over time and whether the effects persist or diminish as markets adapt to new regulatory environments. Researchers might also investigate whether the magnitude of spillover effects varies based on the economic and political relationships between countries, the degree of market integration, or the specific provisions of the securities legislation. Finally, extending this analysis to examine other outcome variables such as earnings quality, cost of capital, or market liquidity could provide a more comprehensive understanding of how cross-border regulatory spillovers affect capital market outcomes through the risk channel.

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**Table 1**

## Descriptive Statistics

<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>
FreqMF	18,611	0.6842	0.9230	0.0000	0.0000	1.6094
Treatment Effect	18,611	0.5792	0.4937	0.0000	1.0000	1.0000
Institutional ownership	18,611	0.5144	0.3182	0.2183	0.5388	0.7901
Firm size	18,611	6.0073	1.9849	4.5692	5.9288	7.3198
Book-to-market	18,611	0.4970	0.4092	0.2602	0.4441	0.6688
ROA	18,611	-0.0299	0.2341	-0.0151	0.0250	0.0695
Stock return	18,611	0.0009	0.4966	-0.2742	-0.0975	0.1329
Earnings volatility	18,611	0.1518	0.2931	0.0223	0.0544	0.1493
Loss	18,611	0.2876	0.4527	0.0000	0.0000	1.0000
Class action litigation risk	18,611	0.2915	0.2837	0.0761	0.1786	0.4235
Time Trend	18,611	1.9302	1.4150	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**  
**Capital Market Law Lebanon Reputation Risk**

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
Treatment Effect	1.00	<b>-0.02</b>	<b>0.14</b>	<b>0.07</b>	-0.00	0.01	<b>-0.04</b>	-0.00	<b>-0.03</b>	<b>-0.22</b>
FreqMF	<b>-0.02</b>	1.00	<b>0.45</b>	<b>0.44</b>	<b>-0.11</b>	<b>0.23</b>	<b>-0.02</b>	<b>-0.13</b>	<b>-0.25</b>	<b>0.03</b>
Institutional ownership	<b>0.14</b>	<b>0.45</b>	1.00	<b>0.66</b>	<b>-0.09</b>	<b>0.28</b>	<b>-0.11</b>	<b>-0.20</b>	<b>-0.22</b>	0.01
Firm size	<b>0.07</b>	<b>0.44</b>	<b>0.66</b>	1.00	<b>-0.26</b>	<b>0.33</b>	0.00	<b>-0.24</b>	<b>-0.36</b>	<b>0.06</b>
Book-to-market	-0.00	<b>-0.11</b>	<b>-0.09</b>	<b>-0.26</b>	1.00	<b>0.11</b>	<b>-0.21</b>	<b>-0.17</b>	-0.00	<b>-0.14</b>
ROA	0.01	<b>0.23</b>	<b>0.28</b>	<b>0.33</b>	<b>0.11</b>	1.00	<b>0.11</b>	<b>-0.50</b>	<b>-0.62</b>	<b>-0.17</b>
Stock return	<b>-0.04</b>	<b>-0.02</b>	<b>-0.11</b>	0.00	<b>-0.21</b>	<b>0.11</b>	1.00	<b>0.03</b>	<b>-0.09</b>	<b>0.06</b>
Earnings volatility	-0.00	<b>-0.13</b>	<b>-0.20</b>	<b>-0.24</b>	<b>-0.17</b>	<b>-0.50</b>	<b>0.03</b>	1.00	<b>0.37</b>	<b>0.24</b>
Loss	<b>-0.03</b>	<b>-0.25</b>	<b>-0.22</b>	<b>-0.36</b>	-0.00	<b>-0.62</b>	<b>-0.09</b>	<b>0.37</b>	1.00	<b>0.24</b>
Class action litigation risk	<b>-0.22</b>	<b>0.03</b>	0.01	<b>0.06</b>	<b>-0.14</b>	<b>-0.17</b>	<b>0.06</b>	<b>0.24</b>	<b>0.24</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 Capital Market Law Lebanon on Management Forecast Frequency**

	(1)	(2)	(3)
Treatment Effect	-0.0418*** (4.02)	0.0617*** (4.94)	0.0313*** (2.82)
Institutional ownership		0.8887*** (18.72)	-0.1557** (2.48)
Firm size		0.0893*** (9.95)	0.1535*** (10.14)
Book-to-market		-0.0623*** (2.97)	-0.0146 (0.59)
ROA		0.1836*** (5.29)	0.0447 (1.56)
Stock return		-0.0149 (1.32)	-0.0347*** (3.66)
Earnings volatility		0.1008*** (3.25)	-0.1111*** (2.93)
Loss		-0.2098*** (10.37)	-0.1075*** (6.57)
Class action litigation risk		0.0620** (2.16)	-0.0173 (0.86)
Time Trend		-0.0829*** (16.25)	-0.0383*** (7.73)
Firm fixed effects	No	No	Yes
N	18,611	18,611	18,611
R <sup>2</sup>	0.0005	0.2617	0.8500

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