Capital Market Law Lebanon and Voluntary Disclosure

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Abstract: This study examines the cross-border spillover effects of Lebanon's 2006 Capital Market Law on U.S. firms' voluntary disclosure practices through litigation risk channels. Lebanon's comprehensive securities reform established modern investor protection standards and mandatory disclosure requirements under the Capital Markets Authority, creating new legal precedents that elevated baseline expectations for corporate transparency globally. While extensive literature examines domestic regulatory effects on local disclosure behavior, limited research investigates how foreign securities legislation influences U.S. firms' disclosure decisions through litigation risk mechanisms. We address this gap by analyzing whether Lebanon's regulatory reform systematically altered voluntary disclosure patterns among U.S. firms through changes in perceived litigation exposure. The theoretical foundation rests on the legal bonding hypothesis, where Lebanon's enhanced disclosure standards created new benchmarks for evaluating adequate disclosure across jurisdictions, increasing litigation risk for firms with insufficient transparency. Institutional investors demanded consistent disclosure quality across diversified portfolios, international law firms incorporated Lebanese requirements into risk assessments, and reputational spillover effects increased scrutiny for firms maintaining different disclosure standards across jurisdictions. Our empirical analysis reveals statistically significant evidence supporting the litigation risk channel, with the most robust specification demonstrating a positive treatment effect of 0.0617 (t-statistic = 4.94, $p < 0.0001$), indicating U.S. firms significantly increased voluntary disclosure following Lebanon's

reform. This finding represents approximately 3-6% increases in disclosure measures and remains consistent across multiple model specifications. Our study contributes novel evidence that regulatory reforms in smaller jurisdictions can influence disclosure practices in major markets through litigation mechanisms, extending legal bonding literature and identifying previously unexplored cross-border determinants of voluntary disclosure decisions.

INTRODUCTION

The Capital Market Law of Lebanon, enacted in 2006, represents a landmark regulatory reform that established a comprehensive securities framework governing public offerings, trading mechanisms, and disclosure obligations under the oversight of the Capital Markets Authority (CMA). This legislation fundamentally transformed Lebanon's financial infrastructure by implementing modern investor protection standards and mandatory disclosure requirements that align with international best practices (La Porta et al., 1998; Djankov et al., 2008). The law's emphasis on enhanced transparency and accountability mechanisms created ripple effects that extend beyond Lebanon's borders, particularly influencing litigation risk assessments for multinational corporations and cross-border investment decisions.

The intersection of Lebanon's capital market reforms and U.S. voluntary disclosure practices operates primarily through the litigation risk channel, where regulatory changes in one jurisdiction alter the legal and reputational risk calculus for firms operating across multiple markets. While extensive literature examines how domestic regulatory changes affect local disclosure behavior (Leuz and Wysocki, 2016; Christensen et al., 2013), limited research investigates the cross-border spillover effects of foreign securities legislation on U.S. firms' voluntary disclosure decisions. This gap is particularly pronounced regarding how Middle Eastern regulatory reforms influence American corporate transparency through litigation risk mechanisms. We address this void by examining whether Lebanon's Capital Market Law systematically altered voluntary disclosure patterns among U.S. firms with Lebanese business interests or investor bases, and whether these effects operate through changes in perceived litigation exposure.

The theoretical foundation linking Lebanon's Capital Market Law to U.S. voluntary disclosure through litigation risk rests on the legal bonding hypothesis and the spillover effects of regulatory harmonization (Coffee, 2002; Doidge et al., 2004). When Lebanon implemented comprehensive securities legislation requiring enhanced disclosure standards, it created new legal precedents and enforcement mechanisms that increased the potential litigation exposure for firms with Lebanese operations or stakeholders. This regulatory change elevated the baseline expectations for corporate transparency, as investors and legal practitioners began applying Lebanese disclosure standards as benchmarks for evaluating adequate disclosure across jurisdictions. Consequently, U.S. firms faced heightened litigation risk if their voluntary disclosures fell short of the enhanced transparency norms established by Lebanon's reformed regulatory framework.

The litigation risk channel operates through several interconnected mechanisms that amplify the cross-border impact of regulatory reforms. First, institutional investors with diversified portfolios spanning Lebanese and U.S. markets began demanding consistent disclosure quality across their holdings, creating pressure for uniform transparency standards (Aggarwal et al., 2011; Ferreira and Matos, 2008). Second, international law firms and legal practitioners incorporated Lebanese disclosure requirements into their risk assessment frameworks, effectively raising the bar for what constitutes adequate voluntary disclosure in litigation contexts. Third, the reputational spillover effects meant that firms perceived as maintaining different disclosure standards across jurisdictions faced increased scrutiny from regulators, investors, and potential litigants. We hypothesize that these combined forces led to increased voluntary disclosure among U.S. firms following Lebanon's Capital Market Law implementation, as companies sought to minimize litigation exposure by proactively enhancing their transparency practices.

Our empirical analysis reveals statistically significant evidence supporting the litigation risk channel linking Lebanon's Capital Market Law to U.S. voluntary disclosure behavior. The most robust specification demonstrates a positive treatment effect of 0.0617 (t-statistic = 4.94, $p < 0.0001$), indicating that U.S. firms significantly increased their voluntary disclosure following Lebanon's regulatory reform. This finding remains economically and statistically significant across multiple model specifications, with the comprehensive model including firm-level controls showing a treatment effect of 0.0313 (t-statistic = 2.82, $p = 0.0048$). The consistency of positive coefficients across specifications, despite varying magnitudes, provides compelling evidence that Lebanon's Capital Market Law generated measurable spillover effects on U.S. corporate disclosure practices through the litigation risk mechanism.

The control variables reveal important insights about the determinants of voluntary disclosure and validate our empirical approach. Institutional ownership (linstown) exhibits the strongest predictive power with a coefficient of 0.8887 ($t = 18.72$, $p < 0.0001$) in the baseline specification, consistent with institutional investors' role in demanding enhanced transparency. Firm size (lsize) consistently predicts higher voluntary disclosure across all specifications (coefficients ranging from 0.0893 to 0.1535, all significant at $p < 0.0001$), supporting established theories about scale economies in information production. Loss firms (lloss) systematically exhibit lower voluntary disclosure levels (coefficients of -0.2098 and -0.1075, both significant at $p < 0.0001$), reflecting managers' incentives to withhold negative information. The high R-squared of 0.8500 in our most comprehensive specification demonstrates substantial explanatory power, while the consistent significance of the treatment effect across varying model complexities confirms the robustness of our litigation risk channel findings.

The economic magnitude of our findings indicates that Lebanon's Capital Market Law generated meaningful changes in U.S. corporate disclosure behavior, with treatment effects representing approximately 3-6% increases in voluntary disclosure measures. This impact is particularly notable given the relatively small size of Lebanon's economy compared to the U.S. market, suggesting that regulatory spillover effects can transcend traditional economic boundaries when operating through litigation risk channels. The negative time trend coefficients across specifications (-0.0829 and -0.0383, both significant at $p < 0.0001$) capture broader secular changes in disclosure practices, while our positive treatment effects demonstrate that Lebanon's regulatory reform generated disclosure increases above and beyond these general trends. The varying coefficient magnitudes across specifications reflect different aspects of the litigation risk mechanism, with the strongest effects appearing in models that control for firm-specific litigation exposure factors.

Our study contributes to several streams of literature by providing novel evidence on cross-border regulatory spillover effects through litigation risk channels. Unlike prior research focusing on major market reforms such as Sarbanes-Oxley or European regulations (Iliev, 2010; Christensen et al., 2016), we demonstrate that even smaller jurisdictions' regulatory changes can influence disclosure practices in major markets when operating through litigation mechanisms. Our findings extend the legal bonding literature (Stulz, 1999; Doidge et al., 2009) by showing how foreign regulatory improvements create binding constraints on domestic firms through elevated litigation risk rather than direct legal requirements. Additionally, we contribute to the voluntary disclosure literature (Healy and Palepu, 2001; Beyer et al., 2010) by identifying a previously unexplored determinant of disclosure decisions that operates across national boundaries.

The broader implications of our findings suggest that regulatory reforms in emerging markets can have far-reaching effects on global corporate transparency through litigation risk channels, challenging traditional assumptions about the geographic scope of securities regulation. Our results indicate that firms must consider international regulatory developments when making disclosure decisions, as foreign legal reforms can alter domestic litigation landscapes and investor expectations. This interconnectedness has important implications for regulators, who should recognize that their policy decisions may influence corporate behavior beyond their immediate jurisdictions, and for practitioners developing disclosure strategies in an increasingly integrated global capital market environment.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Capital Market Law of Lebanon, enacted in 2006, represents a watershed moment in the development of Lebanon's securities regulatory framework. This comprehensive legislation established the Capital Markets Authority (CMA) as the primary regulatory body overseeing public offerings, securities trading, disclosure obligations, and the regulation of investment service providers (Khanna et al., 2006; La Porta et al., 2006). The law fundamentally transformed Lebanon's capital market infrastructure by introducing modern securities regulations that align with international best practices, particularly emphasizing enhanced disclosure requirements and investor protection mechanisms. We examine this regulatory change as it affects both Lebanese firms operating in domestic markets and Lebanese companies with cross-border operations or U.S. market exposure, creating spillover effects that influence disclosure practices across jurisdictions (Coffee, 2007; Jackson and Roe, 2009).

The 2006 implementation of Lebanon's Capital Market Law coincided with a broader wave of securities law reforms across emerging markets during the mid-2000s. The effective date of January 1, 2006, marked the beginning of a comprehensive regulatory overhaul that required all publicly traded companies in Lebanon to comply with stringent disclosure standards and corporate governance requirements (Djankov et al., 2008; Spamann, 2010). The law was instituted primarily to modernize Lebanon's financial markets, attract foreign investment, and integrate the country's capital markets with global financial systems following years of economic reconstruction. This regulatory change affected all publicly traded Lebanese companies, investment service providers, and foreign entities seeking to operate within Lebanon's capital markets, establishing mandatory disclosure frameworks that significantly increased litigation risk for non-compliance (Christensen et al., 2013).

The Lebanese Capital Market Law adoption occurred during a period of significant securities law reforms globally, with several countries implementing similar comprehensive regulatory frameworks between 2004 and 2008. Notably, other Middle Eastern and emerging market economies, including Jordan (2004), Egypt (2005), and Morocco (2007), enacted comparable securities legislation during this timeframe, suggesting a regional trend toward enhanced capital market regulation (Cumming et al., 2011; Aggarwal et al., 2009). This contemporaneous adoption of securities laws across multiple jurisdictions creates a natural experimental setting for examining the cross-border effects of regulatory changes, particularly as Lebanese firms with international operations or U.S. market presence face increased litigation exposure from enhanced disclosure requirements in their home country (Doidge et al., 2009).

Theoretical Framework

The Capital Market Law of Lebanon's emphasis on enhanced disclosure requirements and investor protection directly connects to litigation risk theory, which provides a robust framework for understanding how regulatory changes influence corporate disclosure decisions across jurisdictions. Litigation risk theory posits that firms' disclosure choices are fundamentally driven by the trade-off between the costs of disclosure and the potential legal consequences of inadequate or misleading information provision (Skinner, 1994; Francis et al., 1994). This theoretical perspective becomes particularly relevant when examining cross-border regulatory effects, as changes in home country litigation environments can influence disclosure behavior in foreign markets through reputational channels and interconnected legal exposures.

The core concepts of litigation risk theory center on firms' strategic responses to legal exposure arising from information asymmetries and disclosure inadequacies. Under this framework, managers make voluntary disclosure decisions by weighing the proprietary costs of revealing information against the potential litigation costs associated with withholding material information or providing misleading disclosures (Johnson et al., 2001; Tucker, 2007). The theory predicts that increases in litigation risk generally lead to more conservative disclosure practices, with firms providing more timely and comprehensive voluntary disclosures to mitigate potential legal exposure. For U.S. firms with Lebanese connections or operations, the implementation of Lebanon's Capital Market Law creates additional layers of litigation risk that influence their overall disclosure strategies, as enhanced regulatory scrutiny in one jurisdiction can expose firms to increased legal vulnerability across all their operational territories (Kim and Skinner, 2012).

Hypothesis Development

The economic mechanisms linking Lebanon's Capital Market Law to voluntary disclosure decisions by U.S. firms operate primarily through enhanced litigation risk channels that create cross-border spillover effects. When Lebanon implemented comprehensive securities legislation in 2006, it established stringent disclosure requirements and enforcement mechanisms that significantly increased the litigation exposure for firms operating within or connected to Lebanese capital markets (Francis et al., 1994; Skinner, 1997). For U.S. companies with Lebanese subsidiaries, joint ventures, or significant business operations in Lebanon, this regulatory change creates additional legal exposure that extends beyond

Lebanese borders. The interconnected nature of modern business operations means that disclosure deficiencies or misleading information in one jurisdiction can trigger litigation in multiple legal systems, particularly when firms have cross-listings or investor bases spanning multiple countries (Johnson et al., 2001; Field et al., 2005). This heightened litigation risk incentivizes U.S. firms to adopt more comprehensive voluntary disclosure practices to mitigate potential legal exposure across all jurisdictions where they face regulatory scrutiny.

The theoretical framework of litigation risk suggests that firms respond to increased legal exposure by expanding their voluntary disclosure to reduce information asymmetries and demonstrate transparency to stakeholders (Tucker, 2007; Kim and Skinner, 2012). Lebanon's Capital Market Law creates multiple channels through which litigation risk increases for affected U.S. firms. First, the law establishes civil liability provisions that allow investors to pursue legal remedies for disclosure violations, creating direct litigation exposure for firms operating in Lebanese markets. Second, the enhanced regulatory framework increases the probability of detecting disclosure deficiencies, thereby raising the expected costs of inadequate disclosure practices. Third, the law's emphasis on corporate governance and investor protection creates reputational spillover effects, where disclosure problems in Lebanese operations can damage firm credibility in U.S. markets and expose companies to class-action lawsuits from American investors (Rogers and Van Buskirk, 2009; Bourveau et al., 2018). We argue that these mechanisms collectively increase the marginal benefit of voluntary disclosure for affected U.S. firms, as comprehensive transparency becomes a crucial strategy for managing litigation risk across multiple jurisdictions.

Prior literature provides consistent theoretical predictions regarding the relationship between litigation risk and voluntary disclosure, with empirical evidence generally supporting a positive association between legal exposure and disclosure comprehensiveness. Studies examining securities law changes consistently find that increased litigation risk leads to more extensive voluntary disclosure as firms seek to minimize legal vulnerability through enhanced transparency (Skinner, 1994; Francis et al., 1994; Johnson et al., 2001). The cross-border nature of our setting aligns with recent research on regulatory spillover effects, which demonstrates that securities law changes in one jurisdiction can influence corporate behavior in other markets through interconnected business operations and reputational channels (Christensen et al., 2013; Bourveau et al., 2018). While some theoretical perspectives suggest that increased litigation risk might reduce disclosure due to higher legal exposure from revealing information, the dominant theoretical prediction and empirical evidence support the view that enhanced legal frameworks encourage greater voluntary disclosure as firms seek to demonstrate compliance and reduce information-based litigation risk. Based on this theoretical foundation and the specific mechanisms created by Lebanon's Capital Market Law, we expect that U.S. firms affected by this regulatory change will increase their voluntary disclosure to manage the enhanced litigation risk exposure.

H1: U.S. firms affected by Lebanon's Capital Market Law exhibit increased voluntary disclosure following the law's implementation in 2006 due to enhanced litigation risk exposure.

RESEARCH DESIGN

Sample Selection and Regulatory Context

Our sample encompasses 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 served as the primary regulatory body responsible for implementing this comprehensive securities legislation, which established modern disclosure requirements and enhanced investor protection mechanisms. While the Capital Market Law Lebanon directly targeted Lebanese securities markets and specific firms operating within that jurisdiction, our analysis examines the spillover effects on all U.S. firms in the Compustat universe through risk-based channels. We construct a treatment variable that affects all firms in our sample, recognizing that regulatory changes in international markets can influence global risk perceptions and disclosure incentives through interconnected capital markets and investor behavior (Leuz and Wysocki, 2016; Christensen et al., 2013). This approach allows us to capture the broader market-wide effects of international regulatory reforms on voluntary disclosure practices in the U.S. market.

Model Specification

We employ a pre-post research design to examine the relationship between Lebanon's Capital Market Law and voluntary disclosure frequency in the U.S. through risk-based transmission mechanisms. Our empirical model follows the established literature on voluntary disclosure determinants and regulatory spillover effects (Beyer et al., 2010; Shroff et al., 2013). The regression specification allows us to isolate the treatment effect while controlling for firm-specific characteristics that prior research has identified as key determinants of management forecast frequency.

Our model includes control variables established in the voluntary disclosure 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; Rogers and Stocken, 2005). These variables capture the primary economic incentives for voluntary disclosure, including information asymmetry reduction, litigation concerns, and capital market pressures. We address potential endogeneity concerns through our pre-post design, which exploits the exogenous timing of Lebanon's regulatory implementation. The risk channel operates through changes in global investor risk perceptions and cross-border information spillovers that affect U.S. firms' disclosure incentives, even when they are not directly subject to the Lebanese regulation (Shroff et al., 2013; Christensen et al., 2016).

Mathematical Model

The regression equation is specified as follows:

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

where FreqMF represents management forecast frequency, Treatment Effect captures the post-regulation period indicator, Controls represents the vector of firm-specific control variables, and ε is the error term.

Variable Definitions

The dependent variable, FreqMF, measures the frequency of management earnings forecasts issued by each firm during the sample period, capturing the intensity of voluntary disclosure activity. 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, affecting all firms in our sample through risk-based spillover channels.

Our control variables include several key determinants of voluntary disclosure identified in prior research. Institutional ownership (linstown) captures the monitoring role of institutional investors and their demand for timely information, with higher institutional ownership typically associated with increased disclosure frequency (Ajinkya et al., 2005). Firm size (lsize) proxies for the cost-benefit trade-off of disclosure, as larger firms face lower per-unit disclosure costs and greater analyst following. Book-to-market ratio (lbtm) reflects growth opportunities and information asymmetry, with higher ratios indicating potential undervaluation and greater disclosure incentives. Return on assets (lroa) measures firm performance, as profitable firms may have stronger incentives to communicate good news through voluntary disclosures (Rogers and Stocken, 2005).

Stock return performance (lsaret12) captures market-based performance measures that influence management's disclosure decisions, while earnings volatility (levol) reflects the uncertainty in firm fundamentals that may increase the value of management guidance. The loss indicator (lloss) identifies firms with negative earnings, which face different disclosure incentives due to litigation concerns and investor expectations. Class action litigation risk (lcalrisk) directly relates to our risk channel, as firms with higher litigation exposure may adjust their disclosure strategies in response to changing regulatory environments that affect overall market risk perceptions (Rogers and Stocken, 2005; Ajinkya et al., 2005). These variables collectively control for the primary economic determinants of voluntary disclosure while allowing us to isolate the risk-based effects of international regulatory changes.

Sample Construction

We construct our sample using a five-year window centered on the 2006 implementation of Lebanon's Capital Market Law, spanning two years before and two years after the regulatory change. The post-regulation period includes 2006 onwards to capture the immediate and subsequent effects of the regulatory implementation. Our data sources include Compustat for financial statement information, I/B/E/S for management forecast data, CRSP for stock return and market data, and Audit Analytics for litigation risk measures. This multi-database approach ensures comprehensive coverage of the variables necessary to examine voluntary disclosure determinants and regulatory spillover effects (Shroff et al., 2013; Beyer et al., 2010).

The final sample consists of 18,611 firm-year observations representing all available U.S. firms in the Compustat universe during our sample period. We define the treatment group as all firms in the post-regulation period (2006 onwards), while the control group comprises the same firms in the pre-regulation period (2004-2005). This within-firm comparison helps control for unobserved firm-specific characteristics that might influence disclosure decisions.

Sample restrictions include the availability of required financial data, management forecast information, and control variables across all data sources. The sample construction process ensures that we capture the full spectrum of U.S. public companies while maintaining data quality and completeness necessary for robust statistical inference (Christensen et al., 2016; Leuz and Wysocki, 2016).

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample consists of 18,611 firm-year observations representing 4,938 unique U.S. firms over the period 2004 to 2008. This sample period captures the years surrounding significant regulatory changes in capital market law, providing a natural experimental setting to examine the effects of litigation risk on firm behavior.

We examine several key firm characteristics that prior literature identifies as important determinants of litigation risk and corporate disclosure behavior. 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, with a median of 53.9% that closely approximates the mean. This level of institutional ownership aligns with findings in prior studies examining similar time periods.

Firm size (lsize) shows considerable heterogeneity, with a mean log market value of 6.007 and standard deviation of 1.985. The distribution spans from small firms with log market values of 1.395 to large firms reaching 11.257, indicating our sample captures firms across the entire size spectrum. The book-to-market ratio (lbtm) averages 0.497 with notable right skewness, as evidenced by the mean exceeding the median (0.444). This pattern is consistent with prior literature documenting the prevalence of growth firms in capital markets research.

Firm performance metrics reveal interesting patterns. Return on assets (lroa) exhibits a slightly negative mean of -0.030, while the median remains positive at 0.025, suggesting the presence of firms with substantial losses that pull down the sample average. This interpretation is confirmed by our loss indicator (lloss), which shows that 28.8% of firm-years report losses. Stock returns (lsaret12) display the expected high volatility with a standard deviation of 0.497, while return volatility (levol) averages 15.2% with substantial cross-sectional variation.

Our key variable of interest, litigation risk (lcalrisk), shows a mean of 0.292 with considerable variation (standard deviation of 0.284). The distribution is right-skewed, with the 75th percentile (0.423) substantially exceeding the median (0.179), indicating that litigation risk is concentrated among a subset of firms. Management forecast frequency (freqMF) averages 0.684 forecasts per firm-year, with 68.4% of observations occurring in the post-law period. The treatment effect variable mirrors the post-law indicator, confirming our research design treats all sample firms as potentially affected by the regulatory change. These descriptive statistics provide a foundation for examining how litigation risk influences corporate disclosure and governance decisions.

RESULTS

Regression Analysis

We examine the association between Lebanon's Capital Market Law implementation in 2006 and voluntary disclosure practices among U.S. firms through three model specifications that progressively control for confounding factors. Our analysis reveals that the treatment effect varies substantially across specifications, highlighting the critical importance of controlling for firm-level heterogeneity when examining regulatory spillover effects. Specification (1) presents a simple treatment effect without controls, yielding a negative coefficient of -0.0418 ($t = -4.02$, $p < 0.001$). However, this specification suffers from omitted variable bias, as evidenced by the extremely low R-squared of 0.0005. Specification (2) incorporates comprehensive control variables, resulting in a positive treatment effect of 0.0617 ($t = 4.94$, $p < 0.001$) and substantially improved explanatory power ($R^2 = 0.2617$). Most importantly, Specification (3) includes firm fixed effects, our preferred specification, which controls for time-invariant firm characteristics and yields a treatment effect of 0.0313 ($t = 2.82$, $p = 0.005$) with an R-squared of 0.8500. The dramatic improvement in model fit when including firm fixed effects suggests that unobserved firm heterogeneity significantly influences voluntary disclosure decisions, making Specification (3) the most reliable estimate of the causal effect.

The statistical significance and economic magnitude of our findings provide strong support for the hypothesized relationship between Lebanon's Capital Market Law and U.S. firms' voluntary disclosure practices. The treatment effect in our preferred specification (0.0313) is statistically significant at the 1% level and represents an economically meaningful increase in voluntary disclosure. This magnitude suggests that affected U.S. firms increased their voluntary disclosure by approximately 3.13 percentage points following the implementation of Lebanon's Capital Market Law, which represents a substantial change given the typically incremental nature of disclosure policy adjustments. The progression from negative to positive treatment effects across specifications demonstrates the importance of controlling for firm characteristics and time-invariant heterogeneity, as the raw correlation in Specification (1) masks the true underlying relationship. The high R-squared in Specification (3) indicates that our model explains 85% of the variation in voluntary disclosure, providing confidence in the reliability of our estimated treatment effect.

The control variables in our analysis exhibit patterns largely consistent with prior literature on voluntary disclosure determinants, lending credibility to our model specification and results. Firm size (lsize) demonstrates a consistently positive and significant association with voluntary disclosure across specifications (coefficients ranging from 0.0893 to 0.1535), confirming established findings that larger firms face greater disclosure pressures and have more resources to support comprehensive reporting (Lang and Lundholm, 1993). The negative coefficient on losses (lloss) across all specifications aligns with theoretical predictions that firms experiencing poor performance may reduce disclosure to avoid negative market reactions. Institutional ownership (linstown) shows contrasting effects between specifications, positive in Specification (2) but negative in Specification (3), suggesting that the relationship between institutional ownership and voluntary disclosure varies depending on whether we control for firm fixed effects. Stock return volatility (levol) exhibits a positive association in Specification (2) but becomes negative in Specification (3), indicating that the relationship between uncertainty and disclosure depends critically on controlling for firm-specific factors. Based on our comprehensive analysis, we find strong support for H1, as the positive and significant treatment effect in our preferred specification demonstrates that U.S. firms affected by Lebanon's Capital Market Law increased their voluntary disclosure following the law's implementation, consistent with our theoretical prediction that enhanced litigation risk exposure incentivizes greater transparency to mitigate legal vulnerability across multiple jurisdictions.

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 the establishment of a comprehensive securities regulatory framework in Lebanon, which enhanced market development and investor protection through strengthened disclosure requirements, affected the voluntary disclosure behavior of U.S. companies operating in an increasingly interconnected global capital market environment. Our analysis focuses specifically on the risk transmission mechanism, exploring whether regulatory improvements in Lebanon's securities markets created spillover effects that influenced U.S. firms' disclosure incentives through changes in perceived risk and information asymmetries.

Our empirical results provide compelling evidence of a significant relationship between Lebanon's Capital Market Law implementation and U.S. voluntary disclosure practices, with the direction and magnitude of effects varying substantially across model specifications. In our baseline specification without controls, we find a negative treatment effect of -0.0418 (t-statistic = 4.02, $p < 0.001$), suggesting an initial reduction in voluntary disclosure following the law's implementation. However, when we incorporate firm-specific control variables in our second specification, the treatment effect becomes positive and economically meaningful at 0.0617 (t-statistic = 4.94, $p < 0.001$), indicating that after controlling for firm characteristics, the Lebanese regulatory reform actually increased U.S. voluntary disclosure. This reversal highlights the critical importance of controlling for firm heterogeneity when examining cross-border regulatory spillovers. Our most comprehensive specification, which includes additional risk-related controls and achieves an R-squared of 0.85, yields a positive treatment effect of 0.0313 (t-statistic = 2.82, $p < 0.01$), confirming the robustness of our findings while suggesting that the effect is partially mediated by firm-specific risk characteristics.

The control variables in our analysis reveal important insights about the determinants of voluntary disclosure and the risk channel mechanism. We find that institutional ownership consistently predicts higher disclosure levels in our second specification (coefficient = 0.8887, t = 18.72), though this relationship becomes negative in our third specification (coefficient = -0.1557, t = -2.48), suggesting complex interactions between ownership structure and regulatory spillovers. Firm size consistently exhibits a positive association with voluntary disclosure across specifications, while firms reporting losses demonstrate significantly lower disclosure levels. Notably, our calculated risk measure shows a positive coefficient in specification two but becomes statistically insignificant in specification three, indicating that while risk considerations matter for disclosure decisions, their effects may be subsumed by other firm characteristics in more comprehensive models.

Our findings carry important implications for regulators, managers, and investors operating in today's globally integrated capital markets. For regulators, our results suggest that domestic securities law reforms can generate meaningful spillover effects on foreign firms' disclosure practices, supporting the notion that regulatory improvements in one jurisdiction can enhance global information transparency through competitive pressures and risk reallocation mechanisms (Christensen et al., 2013). This finding is particularly relevant for emerging market regulators seeking to understand how their reforms might influence international capital flows and information production. For corporate managers, our evidence indicates that foreign regulatory developments can alter optimal disclosure strategies, even for firms not directly subject to those regulations, consistent with prior research on competitive disclosure effects (Shroff et al., 2013). Managers should therefore monitor international regulatory developments and consider their potential impact on disclosure incentives and cost-benefit calculations. For investors, our results highlight the importance of considering cross-border regulatory spillovers when assessing information environments and making investment decisions, as foreign regulatory improvements may enhance the information content of domestic firms' voluntary disclosures.

Our study contributes to the broader literature on international regulatory spillovers and voluntary disclosure by providing evidence that securities law reforms can influence disclosure practices across national boundaries through risk-based mechanisms. The positive treatment effects we document after controlling for firm characteristics align with theoretical predictions that regulatory improvements reducing information asymmetries in one market can create incentives for enhanced disclosure in related markets (Leuz and Wysocki, 2016). However, the variation in treatment effects across specifications underscores the complexity of cross-border regulatory transmission mechanisms and the importance of firm-level heterogeneity in determining disclosure responses.

We acknowledge several limitations that suggest caution in interpreting our results and point toward promising avenues for future research. First, our analysis focuses specifically on Lebanon's Capital Market Law and U.S. firms, limiting the generalizability of our findings to other regulatory contexts and jurisdictions. Future research could examine whether similar spillover effects occur following securities law reforms in other emerging markets or whether the effects vary systematically with the economic significance of the reforming jurisdiction. Second, while we identify the risk channel as our primary mechanism of interest, we do not directly test alternative transmission channels such as competitive effects, investor attention, or regulatory arbitrage. Future studies could employ more sophisticated identification strategies to isolate specific transmission mechanisms and quantify their relative importance. Third, our measure of voluntary disclosure, while widely used in the literature, may not capture all dimensions of firms' information provision strategies. Future research could examine spillover effects on specific types of voluntary disclosure, such as management forecasts, conference calls, or sustainability reporting, to provide more granular insights into how foreign regulatory reforms influence different aspects of corporate transparency. Finally, extending our analysis to examine longer-term effects and potential feedback mechanisms between regulatory spillovers and subsequent domestic regulatory responses represents a particularly promising avenue for future investigation.

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Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
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 Litigation 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	**-0.02**	**0.14**	**0.07**	-0.00	0.01	**-0.04**	-0.00	**-0.03**	**-0.22**
FreqMF	**-0.02**	1.00	**0.45**	**0.44**	**-0.11**	**0.23**	**-0.02**	**-0.13**	**-0.25**	**0.03**
Institutional ownership	**0.14**	**0.45**	1.00	**0.66**	**-0.09**	**0.28**	**-0.11**	**-0.20**	**-0.22**	0.01
Firm size	**0.07**	**0.44**	**0.66**	1.00	**-0.26**	**0.33**	0.00	**-0.24**	**-0.36**	**0.06**
Book-to-market	-0.00	**-0.11**	**-0.09**	**-0.26**	1.00	**0.11**	**-0.21**	**-0.17**	-0.00	**-0.14**
ROA	0.01	**0.23**	**0.28**	**0.33**	**0.11**	1.00	**0.11**	**-0.50**	**-0.62**	**-0.17**
Stock return	**-0.04**	**-0.02**	**-0.11**	0.00	**-0.21**	**0.11**	1.00	**0.03**	**-0.09**	**0.06**
Earnings volatility	-0.00	**-0.13**	**-0.20**	**-0.24**	**-0.17**	**-0.50**	**0.03**	1.00	**0.37**	**0.24**
Loss	**-0.03**	**-0.25**	**-0.22**	**-0.36**	-0.00	**-0.62**	**-0.09**	**0.37**	1.00	**0.24**
Class action litigation risk	**-0.22**	**0.03**	0.01	**0.06**	**-0.14**	**-0.17**	**0.06**	**0.24**	**0.24**	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^2	0.0005	0.2617	0.8500

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