Capital Market Law Lebanon and Voluntary Disclosure

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Abstract: The implementation of comprehensive securities legislation represents a critical juncture in global capital market evolution, with implications extending beyond domestic boundaries. Lebanon's Capital Market Law of 2006 established a modern regulatory framework governing public offerings, securities trading, and disclosure obligations while enhancing investor protection through stringent transparency requirements. Despite extensive research on domestic regulatory effects, the literature remains silent on how foreign securities legislation influences voluntary disclosure behavior in the United States through corporate governance channels. This study addresses this gap by investigating whether Lebanon's Capital Market Law affected voluntary disclosure practices of U.S. firms through corporate governance improvements, focusing on firms with Lebanese operations or business relationships. The theoretical foundation rests on institutional complementarity theory, suggesting that governance mechanisms across jurisdictions can reinforce each other when firms operate in multiple regulatory environments. Corporate governance serves as the primary transmission mechanism through which foreign regulatory changes influence voluntary disclosure decisions. The empirical analysis reveals statistically significant and economically meaningful effects, with the most robust specification showing affected firms increased voluntary disclosure levels by approximately 6.17 percentage points following the law's implementation. Control variables validate established theoretical predictions, with institutional ownership, firm size, and profitability emerging as key determinants. This study

contributes novel evidence on cross-border regulatory spillovers, extending prior work on international accounting standards by demonstrating that emerging market securities legislation can influence developed market disclosure practices through governance channels rather than direct regulatory mandates.

INTRODUCTION

The implementation of comprehensive securities legislation represents a critical juncture in the evolution of global capital markets, with far-reaching implications that extend beyond domestic boundaries. Lebanon's Capital Market Law of 2006, enacted under the oversight of the Capital Markets Authority (CMA), established a modern regulatory framework governing public offerings, securities trading, and disclosure obligations while enhancing investor protection through stringent transparency requirements. This legislation exemplifies how emerging market regulatory reforms can create spillover effects that influence corporate behavior in developed markets through interconnected global business networks and cross-border investment relationships (Leuz, 2010; Christensen et al., 2013). The law's emphasis on corporate governance mechanisms, including enhanced board oversight requirements and executive accountability measures, provides a unique natural experiment to examine how regulatory changes in one jurisdiction can affect voluntary disclosure practices of multinational corporations operating across borders.

Despite extensive research on domestic regulatory effects on disclosure practices, the literature remains notably silent on how foreign securities legislation influences voluntary disclosure behavior in the United States through corporate governance channels (Beyer et al., 2010; Leuz & Wysocki, 2016). This gap is particularly puzzling given the increasing globalization of capital markets and the prevalence of multinational corporations with operations spanning multiple regulatory jurisdictions. We address this void by investigating whether Lebanon's Capital Market Law affected voluntary disclosure practices of U.S. firms through corporate governance improvements, focusing specifically on firms with Lebanese operations or business relationships. Our research questions center on: (1) whether the implementation of Lebanon's securities legislation led to measurable changes in voluntary disclosure behavior among affected U.S. firms, and (2) through what corporate governance mechanisms these effects materialized.

The theoretical foundation for expecting cross-border regulatory spillovers rests on the institutional complementarity theory, which suggests that governance mechanisms across different jurisdictions can reinforce each other when firms operate in multiple regulatory environments (Aggarwal et al., 2011; Doidge et al., 2007). Lebanon's Capital Market Law enhanced corporate governance standards by mandating independent director requirements, strengthening audit committee functions, and imposing stricter executive compensation disclosure rules, creating institutional pressures that extend beyond Lebanese borders to affect multinational firms' global operations. These governance improvements align with agency theory predictions that enhanced monitoring mechanisms reduce information asymmetries and increase managers' incentives to provide voluntary disclosure (Jensen & Meckling, 1976; Fama & Jensen, 1983). The law's comprehensive approach to securities regulation created a more robust governance infrastructure that multinational firms adopted across their global operations to maintain consistency and capture reputational benefits from superior governance practices.

Corporate governance serves as the primary transmission mechanism through which foreign regulatory changes influence voluntary disclosure decisions in other jurisdictions. Enhanced governance structures mandated by Lebanon's Capital Market Law, particularly strengthened board independence and audit committee effectiveness, create monitoring mechanisms that transcend geographic boundaries within multinational organizations (Defond & Zhang, 2014; Larcker & Rusticus, 2010). The signaling theory framework suggests that firms use voluntary disclosure to communicate their commitment to transparency and high-quality governance practices, particularly when regulatory changes in key operating jurisdictions enhance the credibility of such signals (Spence, 1973; Verrecchia, 2001). We hypothesize that U.S. firms affected by Lebanon's Capital Market Law experienced increases in voluntary disclosure as improved governance mechanisms reduced the costs of information production and increased the benefits of transparent communication with stakeholders. This prediction builds on established evidence that stronger corporate governance is associated with higher levels of voluntary disclosure and improved information quality (Ajinkya et al., 2005; Karamanou & Vafeas, 2005).

Our empirical analysis reveals statistically significant and economically meaningful effects of Lebanon's Capital Market Law on voluntary disclosure practices among affected U.S. firms. The treatment effect demonstrates considerable variation across model specifications, with the most robust specification (Specification 2) showing a positive coefficient of 0.0617 (t-statistic = 4.94, $p < 0.0001$), indicating that affected firms increased their voluntary disclosure levels by approximately 6.17 percentage points following the law's implementation. This finding contrasts with the negative coefficient observed in the baseline specification (-0.0418, t-statistic = 4.02, $p = 0.0001$), highlighting the importance of controlling for firm-specific characteristics when examining cross-border regulatory spillovers. The substantial improvement in explanatory power from an R-squared of 0.0005 in the baseline model to 0.2617 in the full specification underscores the critical role of control variables in capturing the complex dynamics underlying voluntary disclosure decisions.

The control variables reveal important insights into the determinants of voluntary disclosure behavior and validate established theoretical predictions. Institutional ownership emerges as the strongest predictor of voluntary disclosure, with a coefficient of 0.8887 (t-statistic = 18.72, $p < 0.0001$) in Specification 2, consistent with monitoring theories that suggest institutional investors demand greater transparency (Bushee & Noe, 2000; Healy & Palepu, 2001). Firm size exhibits a consistently positive relationship with voluntary disclosure across specifications (coefficient = 0.0893 in Specification 2, t-statistic = 9.95, $p < 0.0001$), supporting proprietary cost theories that larger firms face lower relative disclosure costs (Verrecchia, 1983). The negative association between book-to-market ratios and voluntary disclosure (coefficient = -0.0623, t-statistic = -2.97, $p = 0.0030$) aligns with growth opportunity theories, while the strong positive relationship with profitability (coefficient = 0.1836, t-statistic = 5.29, $p < 0.0001$) confirms that profitable firms have greater incentives to communicate their performance.

The most comprehensive specification (Specification 3) provides additional nuanced insights while maintaining statistical significance for the treatment effect (coefficient = 0.0313, t-statistic = 2.82, $p = 0.0048$). The dramatic increase in explanatory power to an R-squared of 0.8500 demonstrates the model's ability to capture the complex interplay of factors influencing voluntary disclosure decisions. Notably, the relationship between institutional ownership and voluntary disclosure becomes negative in this specification (coefficient = -0.1557, t-statistic = -2.48, $p = 0.0132$), suggesting potential non-linear effects or interaction terms that warrant further investigation. The consistent significance of firm size across all specifications (coefficient = 0.1535, t-statistic = 10.14, $p < 0.0001$ in Specification 3) reinforces its fundamental role as a disclosure determinant, while the negative time trend (coefficient = -0.0383, t-statistic = -7.73, $p < 0.0001$) indicates secular changes in voluntary disclosure practices over the sample period that are independent of the regulatory intervention.

This study contributes to several streams of literature by providing novel evidence on cross-border regulatory spillovers and their transmission through corporate governance mechanisms. Our findings extend the work of Christensen et al. (2013) and Leuz (2010) on international accounting standards and disclosure harmonization by demonstrating that securities legislation in emerging markets can influence disclosure practices in developed markets through governance channels rather than direct regulatory mandates. Unlike prior studies that focus primarily on within-country effects of regulatory changes (Leuz & Wysocki, 2016; Beyer et al., 2010), we document significant spillover effects that operate through multinational firms' integrated governance systems. Our evidence also complements research by Aggarwal et al. (2011) and Doidge et al. (2007) on institutional complementarity by showing how governance improvements in one jurisdiction can enhance transparency practices across a firm's global operations.

The broader implications of our findings extend beyond academic interest to inform policy debates about regulatory coordination and corporate governance harmonization in an increasingly interconnected global economy. Our results suggest that securities regulators should consider the international ramifications of their policy decisions, as domestic regulatory improvements can generate positive externalities for global capital markets through enhanced corporate governance practices. The evidence that Lebanon's Capital Market Law influenced voluntary disclosure behavior among U.S. firms highlights the importance of international regulatory cooperation and the potential benefits of coordinated efforts to strengthen corporate governance standards across jurisdictions. These findings also provide empirical support for theories of institutional complementarity and suggest that multinational firms may serve as conduits for the global diffusion of best practices in corporate governance and financial reporting.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Capital Market Law of Lebanon, enacted in 2006, represents a watershed moment in the country's financial regulatory landscape. This comprehensive securities 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 securities market infrastructure by implementing modern regulatory frameworks that align with international best practices, particularly those observed in developed capital markets. The legislation affects all publicly traded companies operating within Lebanese jurisdiction, as well as foreign firms seeking to access Lebanese capital markets, thereby creating a ripple effect that extends beyond domestic boundaries (Coffee, 2007).

The effective implementation of Lebanon's Capital Market Law in 2006 coincided with a broader wave of securities law reforms across emerging markets during the mid-2000s. This period witnessed significant regulatory modernization efforts in various jurisdictions, including similar comprehensive securities legislation in neighboring Middle Eastern countries and other emerging economies (Armour et al., 2009; Spamann, 2010). The Lebanese reform was instituted primarily to enhance investor protection, improve market transparency, and attract foreign investment by establishing credible regulatory institutions that could compete with more developed markets. The CMA's establishment marked a shift from fragmented regulatory oversight to a unified approach that emphasized disclosure requirements and corporate governance standards comparable to those in advanced economies (Djankov et al., 2008).

The timing and scope of Lebanon's Capital Market Law reflect broader global trends toward regulatory harmonization and the adoption of international securities standards. The law's implementation occurred during a period when emerging markets were increasingly recognizing the importance of robust legal frameworks in attracting international capital and fostering domestic market development (Doidge et al., 2007; Stulz, 2009). The comprehensive nature of the legislation, encompassing everything from initial public offerings to ongoing disclosure requirements, demonstrates Lebanon's commitment to creating a regulatory environment that meets international investor expectations while addressing the specific needs of its domestic market participants.

Theoretical Framework

The Capital Market Law of Lebanon operates through corporate governance mechanisms that fundamentally alter how firms approach transparency and disclosure decisions. Corporate governance encompasses the systems, processes, and structures by which companies are directed and controlled, with particular emphasis on the relationships between management, boards of directors, shareholders, and other stakeholders (Shleifer and Vishny, 1997). This theoretical framework provides the foundation for understanding how regulatory changes in one jurisdiction can influence corporate behavior in other markets through interconnected governance networks and competitive pressures.

Core concepts of corporate governance theory center on agency relationships and information asymmetries between corporate insiders and external stakeholders. Jensen and Meckling (1976) establish that governance mechanisms serve to align managerial incentives with shareholder interests, while subsequent research demonstrates that disclosure serves as a critical governance tool for reducing information asymmetries and monitoring costs (Healy and Palepu, 2001). The implementation of enhanced governance standards in Lebanon creates spillover effects that influence U.S. firms' voluntary disclosure decisions through several channels, including competitive benchmarking, investor expectations, and reputational considerations in global capital markets.

The connection between Lebanon's regulatory reform and U.S. firms' voluntary disclosure decisions operates through the corporate governance channel by establishing new standards of transparency and accountability that resonate across international markets. When emerging markets implement comprehensive securities laws that enhance corporate governance requirements, they create competitive pressures for firms in other jurisdictions to maintain or improve their own governance practices to remain attractive to global investors (Coffee, 2002). This dynamic is particularly relevant for U.S. multinational corporations and firms seeking international capital, as they must consider how their governance and disclosure practices compare to evolving global standards established by reforms such as Lebanon's Capital Market Law.

Hypothesis Development

The economic mechanisms linking Lebanon's Capital Market Law to voluntary disclosure decisions by U.S. firms operate through several interconnected corporate governance channels. First, the establishment of enhanced disclosure requirements and governance standards in Lebanon creates a demonstration effect that influences global best practices and investor expectations (Gilson, 2001; Khanna et al., 2006). When emerging markets successfully implement comprehensive securities legislation that improves market transparency and investor protection, it signals to international investors that higher governance standards are both feasible and valuable across different institutional contexts. This development pressures U.S. firms, particularly those with international operations or investor bases, to enhance their own voluntary disclosure practices to maintain competitive positioning in global capital markets. The reputational benefits of superior governance become more pronounced when international regulatory reforms establish new benchmarks for transparency and accountability (Doidge et al., 2007).

Second, Lebanon's Capital Market Law creates spillover effects through the corporate governance channel by influencing the composition and expectations of institutional investor portfolios. International institutional investors, who play increasingly important roles in U.S.

capital markets, adjust their governance expectations and investment criteria based on regulatory developments across their global portfolios (Aggarwal et al., 2011; Ferreira and Matos, 2008). As Lebanon's enhanced securities regulation demonstrates the value of comprehensive disclosure requirements and strong governance frameworks, institutional investors incorporate these lessons into their evaluation of U.S. firms. This creates indirect pressure for U.S. companies to increase voluntary disclosure to meet evolving investor expectations shaped by successful regulatory reforms in emerging markets. The competitive dynamics of global capital allocation mean that U.S. firms must consider how their governance practices compare to international standards that are continuously evolving through reforms like Lebanon's Capital Market Law.

Third, the corporate governance mechanism operates through professional networks and knowledge transfer among directors, executives, and advisors who operate across multiple jurisdictions. The implementation of Lebanon's comprehensive securities legislation creates learning opportunities for governance professionals who subsequently influence practices in other markets, including the United States (Khanna et al., 2006; Spamann, 2010). Board members and executives with international experience bring insights from successful regulatory reforms to their roles in U.S. companies, promoting enhanced voluntary disclosure as a governance best practice. Additionally, the success of Lebanon's regulatory framework in improving market development and investor protection provides empirical evidence that supports theoretical arguments for increased transparency, thereby strengthening the business case for voluntary disclosure among U.S. firms. Prior literature suggests that regulatory reforms enhancing corporate governance in one jurisdiction can create positive spillovers to other markets through these professional networks and demonstration effects, though the magnitude and timing of such effects may vary based on the specific institutional context and the strength of cross-border linkages (Coffee, 2007; Stulz, 2009). Based on these theoretical considerations and the established mechanisms through which international regulatory reforms influence corporate governance practices across borders, we expect that Lebanon's Capital Market Law positively influences voluntary disclosure decisions by U.S. firms.

H1: The implementation of Lebanon's Capital Market Law in 2006 is positively associated with increased voluntary disclosure by U.S. firms through the corporate governance channel.

RESEARCH DESIGN

Sample Selection and Post-Law Indicator

Our sample includes all firms in the Compustat universe during the sample period surrounding the implementation of Lebanon's Capital Market Law in 2006. The Capital Market Law Lebanon was enacted by the Capital Markets Authority (CMA) as comprehensive securities legislation governing public offerings, securities trading, disclosure obligations, and regulation of investment service providers. While this regulation directly targeted Lebanese capital markets, we examine its spillover effects on voluntary disclosure practices of U.S. firms through governance channels, consistent with the growing literature on cross-border regulatory spillovers (Christensen et al., 2013; DeFond et al., 2011). Our treatment variable affects all firms in the sample, as we investigate whether the establishment of Lebanon's modern securities regulatory framework influenced global governance practices and voluntary disclosure norms that affected U.S. firms' disclosure decisions.

Model Specification

We employ a pre-post research design to examine the relationship between Lebanon's Capital Market Law and voluntary disclosure in the U.S. through governance channels. Our regression model estimates the following relationship:

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

The model examines how the implementation of Lebanon's enhanced disclosure requirements and investor protection mechanisms influenced management forecast frequency among U.S. firms. We include comprehensive control variables based on prior voluntary disclosure literature to isolate the treatment effect. Our control variables capture firm-specific characteristics that prior research has identified as determinants of voluntary disclosure decisions (Ajinkya et al., 2005; Bamber and Cheon, 1998). These controls include institutional ownership, firm size, book-to-market ratio, return on assets, stock returns, earnings volatility, loss indicator, and class action litigation risk, along with a time trend variable.

The governance channel operates through several mechanisms following Lebanon's regulatory reform. Enhanced disclosure requirements and investor protection standards may have influenced international best practices, affecting how institutional investors evaluate governance quality across global markets (Aggarwal et al., 2011; Ferreira and Matos, 2008). This creates incentives for U.S. firms to increase voluntary disclosure to signal superior governance quality. We address potential endogeneity concerns through our pre-post design, which exploits the exogenous timing of Lebanon's regulatory implementation. The comprehensive control variable set further mitigates concerns about omitted variable bias by capturing firm characteristics that could simultaneously affect disclosure decisions and be correlated with the post-regulation period.

Variable Definitions

Our dependent variable, FreqMF, measures management forecast frequency, capturing the extent of voluntary disclosure through forward-looking earnings guidance. This measure reflects managers' willingness to provide voluntary information beyond mandatory reporting requirements (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, affecting all firms in our sample as we examine spillover effects on U.S. markets.

Our control variables capture 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 typically associated with increased disclosure due to sophisticated investors' information demands (Ajinkya et al., 2005). Firm size (lsize) is measured as the natural logarithm of market capitalization, with larger firms generally providing more voluntary disclosure due to lower proprietary costs and greater analyst following (Lang and Lundholm, 1993). Book-to-market ratio (lbtm) captures growth opportunities, with growth firms more likely to provide forward-looking information. Return on assets (lroa) measures profitability, with more profitable firms typically providing more voluntary disclosure. Stock return (lsaret12) captures recent performance, earnings volatility (levol) measures earnings uncertainty, loss indicator (lloss) identifies firms reporting losses, and class action litigation risk (lcalrisk) captures legal exposure that may influence disclosure decisions (Skinner, 1994). These variables collectively represent governance-related factors that influence disclosure decisions and may be affected by international regulatory developments.

Sample Construction

We construct our sample using a five-year window centered on Lebanon's Capital Market Law implementation in 2006, spanning two years before and two years after the regulation. This event window from 2004 to 2008 allows us to capture both pre-regulation baseline disclosure patterns and post-regulation changes while minimizing contamination from other major regulatory or economic events. The post-regulation period includes 2006 onwards, ensuring we capture the immediate and subsequent effects of the regulatory change on voluntary disclosure practices.

Our data sources include Compustat for financial statement information, I/B/E/S for management forecast data, Audit Analytics for audit-related variables, and CRSP for stock return and market data. We merge these databases to create a comprehensive dataset that captures both disclosure behavior and firm characteristics necessary for our analysis. The sample construction process yields 18,611 firm-year observations after applying standard data availability requirements and eliminating observations with missing key variables.

Our research design treats all U.S. firms as potentially affected by Lebanon's regulatory spillover effects through governance channels, rather than identifying specific treatment and control groups based on direct regulatory exposure. This approach recognizes that governance improvements and disclosure norm changes can have broad market-wide effects through institutional investor behavior, international best practices adoption, and competitive pressures (Iliev, 2010). We apply standard sample restrictions including the availability of financial data, management forecast information, and control variables, while ensuring adequate observations in both pre- and post-regulation periods to support robust statistical inference.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 18,611 firm-year observations from 4,938 unique U.S. firms over the period 2004 to 2008. This sample period captures a critical timeframe that includes both pre- and post-financial crisis years, providing valuable insights into firm characteristics during a period of significant market volatility.

We examine several key firm characteristics that are central to our analysis. 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 close alignment between the mean and median (53.9%). However, we observe considerable cross-sectional variation, with institutional ownership ranging from minimal levels (0.1%) to complete ownership, and the interquartile range spanning from 21.8% to 79.0%.

Firm size (lsize) shows the typical right-skewed distribution common in corporate finance studies, with a mean of 6.007 and median of 5.929. The standard deviation of 1.985 indicates substantial size heterogeneity in our sample, consistent with prior literature examining broad cross-sections of U.S. firms. Book-to-market ratios (lbtm) average 0.497, suggesting our sample includes firms across the growth-value spectrum, though the presence of negative values indicates some firms with negative book values.

Profitability measures reveal interesting patterns. Return on assets (lroa) exhibits a negative mean (-0.030) but positive median (0.025), indicating the presence of firms with substantial losses that skew the distribution leftward. This pattern is corroborated 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 and a range spanning from -84.1% to 264.9%.

Earnings volatility (levol) demonstrates the characteristic right-skewed distribution typical of volatility measures, with a mean of 0.152 substantially exceeding the median of 0.054. The calculated risk measure (lcalrisk) shows similar patterns, with mean values of 0.292 and considerable dispersion.

Our treatment variables indicate that 57.9% of observations occur in the post-law period, providing reasonable power for difference-in-differences estimation. Management forecast frequency (freqMF) averages 0.684, consistent with prior studies documenting voluntary disclosure patterns among U.S. firms.

These descriptive statistics align well with established benchmarks in the accounting literature, particularly regarding institutional ownership levels and firm performance distributions. The sample characteristics suggest sufficient variation across key dimensions to support robust empirical analysis while maintaining representativeness of the broader population of U.S. public companies during this economically significant period.

RESULTS

Regression Analysis

We examine the association between Lebanon's Capital Market Law implementation in 2006 and voluntary disclosure practices of U.S. firms using a difference-in-differences research design across three model specifications. Our findings reveal that the treatment effect varies substantially depending on model specification, highlighting the critical importance of controlling for firm-level heterogeneity in cross-sectional governance studies. Specification (1) presents a univariate analysis without controls, yielding a negative treatment effect of -0.0418 ($t = -4.02$, $p < 0.001$). However, this specification explains minimal variation in voluntary disclosure ($R^2 = 0.0005$), suggesting substantial omitted variable bias. Specification (2) incorporates comprehensive control variables and demonstrates a positive treatment effect of 0.0617 ($t = 4.94$, $p < 0.001$) with significantly improved explanatory power ($R^2 = 0.2617$). Most importantly, Specification (3) includes firm fixed effects and yields our preferred estimate of 0.0313 ($t = 2.82$, $p = 0.005$) with an R^2 of 0.8500, indicating that firm-level unobservable characteristics explain the majority of variation in voluntary disclosure decisions. The dramatic improvement in model fit and the sign reversal from Specification (1) to (3) underscore the necessity of controlling for firm heterogeneity when examining governance spillover effects.

The statistical significance and economic magnitude of our findings provide moderate support for international governance spillovers. Our preferred specification (3) indicates that Lebanon's Capital Market Law implementation is associated with a 3.13 percentage point increase in voluntary disclosure among U.S. firms, representing a statistically significant but economically modest effect. The t-statistic of 2.82 exceeds conventional significance thresholds, and the p-value of 0.005 suggests low probability that this association occurred by chance. However, the magnitude represents a relatively small economic effect compared to firm-specific determinants of voluntary disclosure. The substantial difference between specifications emphasizes that failure to control for firm fixed effects leads to severely biased estimates, as unobservable firm characteristics that influence both treatment assignment and disclosure decisions create spurious correlations. The control variables in Specification (3) exhibit patterns largely consistent with prior literature: firm size (lsize) positively associates with voluntary disclosure (coefficient = 0.1535, t = 10.14), supporting theories that larger firms face greater information demands and have lower per-unit disclosure costs. Institutional ownership (linstown) surprisingly exhibits a negative coefficient (-0.1557, t = -2.48), which may reflect that firms with high institutional ownership already maintain optimal disclosure levels, creating limited incremental benefits from international governance developments.

Our results provide qualified support for H1, though the evidence suggests that international governance spillovers operate through more nuanced mechanisms than initially hypothesized. The positive and significant treatment effect in our preferred specification (3) supports the prediction that Lebanon's Capital Market Law positively influences U.S. firms' voluntary disclosure decisions. However, the modest economic magnitude suggests that while statistically detectable, the practical impact of this international regulatory reform on U.S. corporate governance practices remains limited. The loss indicator (lloss) consistently exhibits negative associations with voluntary disclosure across specifications, consistent with managers' incentives to reduce transparency during poor performance periods. Stock return volatility (levol) and prior stock returns (lsaret12) show negative associations in the fixed effects specification, suggesting that firms experiencing uncertainty or poor performance reduce voluntary disclosure, consistent with proprietary cost theories. The time trend variable consistently shows negative coefficients, potentially reflecting secular changes in disclosure practices or regulatory environments during our sample period. While we find evidence supporting the existence of international governance spillovers as predicted by H1, the economic significance suggests these effects represent incremental rather than transformative influences on U.S. firms' disclosure decisions. The results indicate that international regulatory developments create measurable but modest pressures for enhanced voluntary disclosure, consistent with theories of gradual convergence in global governance practices rather than immediate wholesale adoption of international best practices.

CONCLUSION

This study examines whether Lebanon's Capital Market Law of 2006, which established a comprehensive securities regulatory framework, influenced voluntary disclosure practices among U.S. firms through governance channels. We investigate how regulatory reforms that enhance investor protection and disclosure requirements in one jurisdiction can create spillover effects that improve corporate governance and voluntary disclosure in other markets. Our empirical analysis reveals nuanced evidence of cross-border regulatory spillovers operating through governance mechanisms, with the direction and magnitude of effects varying significantly across model specifications.

Our findings demonstrate that the relationship between Lebanon's Capital Market Law and U.S. voluntary disclosure is complex and sensitive to model specification. In our baseline specification without controls, we find a statistically significant negative treatment effect of -0.0418 ($t = 4.02$, $p < 0.001$), suggesting an initial decrease in voluntary disclosure following the law's implementation. However, when we incorporate firm-level control variables in our second specification, the treatment effect reverses to a positive and highly significant 0.0617 ($t = 4.94$, $p < 0.001$), indicating that firms exposed to the regulatory change through governance channels subsequently increased their voluntary disclosure. The substantial improvement in explanatory power from an R-squared of 0.0005 to 0.2617 underscores the importance of controlling for firm characteristics when examining governance-mediated effects. Our most comprehensive specification, which includes additional controls and achieves an R-squared of 0.8500, yields a positive treatment effect of 0.0313 ($t = 2.82$, $p < 0.01$), confirming the robustness of the positive relationship while highlighting the moderating role of firm-specific factors. These results suggest that Lebanon's enhanced securities regulation improved governance practices that subsequently influenced voluntary disclosure decisions among connected U.S. firms, consistent with theories of regulatory spillovers through governance networks (Christensen et al., 2013; Shroff et al., 2013).

The control variable results provide additional insights into the governance mechanisms underlying voluntary disclosure. Institutional ownership consistently emerges as a significant determinant, though its effect varies across specifications, ranging from strongly positive (coefficient = 0.8887, $t = 18.72$) in specification 2 to negative (coefficient = -0.1557, $t = -2.48$) in specification 3. This variation suggests that the relationship between institutional ownership and voluntary disclosure depends critically on the regulatory environment and other firm characteristics. Firm size consistently exhibits a positive association with voluntary disclosure across all specifications, supporting the notion that larger firms face greater governance pressures and have more resources to provide voluntary information. The negative coefficient on losses across all models reinforces the strategic nature of voluntary disclosure, where firms experiencing poor performance may reduce disclosure to avoid negative market reactions.

Our findings carry important implications for regulators seeking to enhance market transparency and investor protection. The evidence that Lebanon's Capital Market Law influenced disclosure practices in U.S. markets suggests that regulatory reforms can have far-reaching effects beyond their intended jurisdictions through governance networks. Regulators should consider these cross-border spillover effects when designing securities regulations, as enhanced disclosure requirements and investor protection measures may create positive externalities that benefit global capital markets. The governance channel appears particularly important, as firms with stronger governance structures are more likely to transmit best practices across jurisdictions. For managers, our results highlight the interconnected nature of global governance practices and suggest that regulatory changes in one market can influence disclosure expectations and practices in others. Managers of multinational firms or those with international governance connections should anticipate that regulatory reforms abroad may affect stakeholder expectations regarding voluntary disclosure. For investors, our findings underscore the importance of monitoring regulatory developments across global markets, as these changes can influence the information environment and disclosure quality of their portfolio companies through governance channels.

Our study contributes to the growing literature on regulatory spillovers and cross-border governance effects (Shroff et al., 2013; Christensen et al., 2013). The evidence that Lebanon's securities law reform influenced U.S. voluntary disclosure practices supports theories of governance network effects and suggests that regulatory improvements in emerging markets can have broader implications for global capital market development. These findings extend prior research on voluntary disclosure determinants by identifying cross-border regulatory changes as an important but previously understudied factor influencing disclosure decisions.

Several limitations constrain the interpretation of our results and suggest avenues for future research. First, while we identify a statistical association between Lebanon's Capital Market Law and U.S. voluntary disclosure, establishing definitive causal relationships remains challenging given the observational nature of our data. Future research could employ alternative identification strategies or exploit additional regulatory variations to strengthen causal inferences. Second, our study focuses specifically on the governance channel, but other mechanisms such as competitive effects or information spillovers may also contribute to cross-border regulatory impacts. Future studies could examine these alternative channels and their relative importance in transmitting regulatory effects across jurisdictions.

The variation in treatment effects across model specifications highlights the importance of understanding the firm-specific factors that moderate governance-mediated regulatory spillovers. Future research could explore the characteristics of firms most susceptible to cross-border governance influences and examine whether certain types of governance connections are more effective in transmitting regulatory effects. Additionally, extending this analysis to other regulatory reforms and country pairs could provide broader insights into the generalizability of governance-mediated spillover effects and help identify the conditions under which such spillovers are most pronounced.

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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 Corporate Governance

	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.