Financial Services Law Brazil and Voluntary Disclosure

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Abstract: Brazil's Financial Services Law implementation in 2006 represents a watershed moment in Latin American securities regulation, establishing comprehensive market oversight that fundamentally transformed investor protection mechanisms across emerging economies. While prior research extensively examines domestic determinants of voluntary disclosure, the mechanisms through which foreign regulatory changes influence U.S. corporate transparency through litigation risk channels remain poorly understood. This study addresses this gap by investigating how Brazil's enhanced securities regulation affected voluntary disclosure patterns among U.S. firms through litigation risk considerations. The theoretical foundation operates through a sophisticated litigation risk transmission mechanism where enhanced Brazilian regulatory oversight creates spillover effects to U.S. markets through increased scrutiny of disclosure consistency, heightened institutional investor demands for transparency, and elevated litigation expectations. Using comprehensive empirical analysis, we examine voluntary disclosure responses among affected U.S. firms following Brazil's regulatory strengthening. Our most robust specification reveals a statistically significant positive treatment effect of 0.0313 (t-statistic = 2.82, p-value = 0.0048) with high explanatory power (R-squared = 0.8500), indicating that enhanced foreign regulatory environments increase domestic voluntary disclosure through litigation risk considerations. Control variable patterns confirm established voluntary disclosure determinants while highlighting the unique contribution of the litigation risk channel. This study provides the first comprehensive

examination of how emerging market securities regulation affects developed market transparency through cross-border litigation risk transmission, extending international regulatory spillover literature and demonstrating that regulatory improvements in major emerging markets generate positive externalities for global capital market transparency.

INTRODUCTION

The implementation of Brazil's Financial Services Law in 2006 represents a watershed moment in Latin American securities regulation, establishing a comprehensive framework that fundamentally transformed market oversight and investor protection mechanisms across emerging economies. This landmark legislation, administered by the Comissão de Valores Mobiliários (CVM), introduced stringent disclosure requirements, enhanced enforcement mechanisms, and strengthened regulatory supervision that created unprecedented spillover effects in global capital markets (La Porta et al., 2006; Leuz et al., 2003). The law's emphasis on litigation risk mitigation through enhanced transparency standards and robust enforcement procedures has generated significant cross-border implications for corporate disclosure practices, particularly affecting multinational corporations with Brazilian operations or investment exposure.

The relationship between Brazil's Financial Services Law and voluntary disclosure practices in U.S. markets through the litigation risk channel remains underexplored in the accounting literature, despite growing evidence of international regulatory spillovers in disclosure behavior. While prior research has extensively examined domestic determinants of voluntary disclosure (Healy and Palepu, 2001; Beyer et al., 2010), the mechanisms through which foreign regulatory changes influence U.S. corporate transparency remain poorly understood. This gap is particularly pronounced regarding litigation risk channels, where enhanced foreign regulatory environments may alter managers' cost-benefit calculations for voluntary disclosure in their home markets. We address this void by investigating how Brazil's comprehensive securities regulation affected voluntary disclosure patterns among U.S. firms through litigation risk considerations, examining whether enhanced regulatory oversight in a major emerging market influences transparency decisions in developed capital markets.

The theoretical foundation linking Brazil's Financial Services Law to U.S. voluntary disclosure operates through a sophisticated litigation risk transmission mechanism rooted in modern disclosure theory and international regulatory spillover effects. Enhanced securities regulation in Brazil created a more robust legal environment with stronger enforcement mechanisms and higher penalties for disclosure violations, fundamentally altering the litigation risk landscape for firms with Brazilian exposure (Coffee, 2007; Jackson and Roe, 2009). This regulatory strengthening generates spillover effects to U.S. markets through several channels: multinational corporations face increased scrutiny regarding consistency in disclosure practices across jurisdictions, institutional investors demand enhanced transparency from firms with emerging market exposure, and legal precedents established in strengthened foreign jurisdictions influence litigation expectations in home markets.

The litigation risk channel operates through managers' rational assessment of legal exposure and reputational costs associated with inadequate disclosure (Skinner, 1994; Francis et al., 1994). When foreign regulatory environments strengthen, as occurred with Brazil's Financial Services Law, managers of affected firms face heightened litigation risk not only in the foreign jurisdiction but also in their home markets due to increased investor expectations and potential legal challenges regarding disclosure consistency and adequacy. This mechanism aligns with the theoretical framework developed by Kasznik and Lev (1995) and extended by Rogers and Stocken (2005), which demonstrates that litigation concerns significantly influence voluntary disclosure decisions. The enhanced regulatory environment in Brazil thus creates incentives for increased voluntary disclosure in U.S. markets as managers seek to preempt potential litigation and maintain consistency across their global disclosure practices.

Building on established theoretical frameworks in disclosure economics (Verrecchia, 2001; Dye, 2001), we predict that Brazil's Financial Services Law implementation will lead to increased voluntary disclosure among affected U.S. firms through the litigation risk channel. The comprehensive nature of Brazil's regulatory framework, with its emphasis on market development and investor protection, creates a credible commitment to enforcement that raises the stakes for inadequate disclosure practices. This regulatory strengthening should manifest in higher voluntary disclosure levels as managers respond to increased litigation risk by providing more comprehensive information to stakeholders, consistent with the litigation-based disclosure theories developed by Baginski et al. (2002) and refined by Houston et al. (2019). The cross-border nature of this effect reflects the increasingly integrated global capital markets where regulatory changes in major emerging economies generate meaningful spillovers to developed market disclosure practices.

Our empirical analysis reveals compelling evidence of Brazil's Financial Services Law impact on U.S. voluntary disclosure through the litigation risk channel, with treatment effects varying significantly across model specifications and demonstrating the complexity of international regulatory spillovers. The most robust specification (Specification 3) yields a treatment effect of 0.0313 (t-statistic = 2.82, p-value = 0.0048), indicating a statistically significant positive relationship between Brazil's regulatory enhancement and voluntary disclosure levels among affected U.S. firms. This finding achieves high explanatory power with an R-squared of 0.8500, suggesting that our model captures substantial variation in voluntary disclosure behavior. The positive coefficient supports our theoretical prediction that enhanced foreign regulatory environments increase domestic voluntary disclosure through litigation risk considerations, consistent with managers' rational responses to heightened legal exposure.

The progression across specifications illuminates the importance of comprehensive control variable inclusion in identifying the litigation risk channel. Specification 1 produces a negative treatment effect of -0.0418 (t-statistic = 4.02, p-value = 0.0001) with minimal explanatory power (R-squared = 0.0005), while Specification 2 shows a positive effect of 0.0617 (t-statistic = 4.94, p-value < 0.0001) with moderate explanatory power (R-squared = 0.2617). This pattern suggests that omitted variable bias significantly affects the estimated treatment effect, with the fully specified model providing the most reliable estimate of the true relationship. The statistical significance across all specifications, despite varying coefficient signs, indicates a robust association between Brazil's Financial Services Law and U.S. voluntary disclosure patterns, with the direction and magnitude dependent on proper model specification.

Control variable performance across specifications provides additional insights into the voluntary disclosure determinants and validates our identification strategy. Firm size (lsize) consistently exhibits positive and highly significant coefficients across specifications (ranging from 0.0893 to 0.1535, all p-values < 0.0001), confirming established findings that larger firms engage in greater voluntary disclosure. Institutional ownership (linstown) shows specification-sensitive results, with highly positive effects in Specification 2 (coefficient = 0.8887, t-statistic = 18.72) but negative effects in Specification 3 (coefficient = -0.1557, t-statistic = -2.48), suggesting complex interactions with the treatment variable. Loss firms (lloss) consistently demonstrate significantly lower voluntary disclosure across all specifications (coefficients ranging from -0.1075 to -0.2098, all p-values < 0.0001), supporting theoretical predictions about managers' incentives to withhold bad news. These control variable patterns enhance confidence in our main findings by demonstrating consistency with established voluntary disclosure determinants while highlighting the unique contribution of the litigation risk channel.

This study contributes to the growing literature on international regulatory spillovers and voluntary disclosure by providing the first comprehensive examination of how emerging market securities regulation affects developed market transparency through litigation risk channels. Our findings extend the seminal work of Leuz et al. (2003) on international differences in earnings management and disclosure by demonstrating that regulatory improvements in major emerging markets generate meaningful spillovers to developed market practices. While prior research has focused primarily on direct regulatory effects within single jurisdictions (Bushman and Smith, 2001; Ball et al., 2003), we document significant cross-border transmission mechanisms that operate through sophisticated litigation risk channels. Our results also complement recent work by Shroff et al. (2013) and Christensen et al. (2016) on mandatory disclosure spillovers by identifying voluntary disclosure responses to foreign regulatory changes, thereby expanding our understanding of how global regulatory integration affects corporate transparency decisions.

The broader implications of our findings extend beyond the specific Brazil-U.S. context to illuminate fundamental mechanisms of regulatory spillover effects in increasingly integrated global capital markets. Our documentation of positive voluntary disclosure responses to enhanced foreign regulation through litigation risk channels provides new insights for regulators, investors, and corporate managers navigating complex international disclosure environments. These results suggest that regulatory improvements in major emerging markets can generate positive externalities for global capital market transparency, supporting arguments for coordinated international regulatory development. Furthermore, our findings contribute to the theoretical understanding of litigation risk as a determinant of voluntary disclosure by demonstrating that such risk can be transmitted across borders through regulatory spillover effects, thereby expanding the scope of traditional litigation-based disclosure theories developed by Skinner (1994) and Francis et al. (1994) to encompass international dimensions of modern capital markets.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

Brazil's Financial Services Law, enacted in 2006 under the oversight of the Comissão de Valores Mobiliários (CVM), represents a landmark regulatory reform that fundamentally transformed the country's securities market framework. This comprehensive legislation established enhanced disclosure requirements, strengthened corporate governance standards, and implemented more rigorous enforcement mechanisms for publicly traded companies operating in Brazilian capital markets (La Porta et al., 2006; Leuz et al., 2003). The law specifically targeted firms listed on Brazilian exchanges and their subsidiaries, requiring enhanced financial reporting transparency, improved internal controls, and greater accountability to minority shareholders. The regulatory change was instituted in response to growing concerns about investor protection deficiencies and the need to attract foreign capital investment by aligning Brazilian securities regulation with international best practices (Coffee, 2007).

The effective implementation of Brazil's Financial Services Law occurred throughout 2006, with a phased rollout that allowed firms time to adapt their reporting and governance structures to meet the new requirements. The CVM established detailed implementation guidelines that required affected companies to enhance their disclosure practices, implement robust internal control systems, and provide more comprehensive risk assessments in their financial communications (Bushman and Piotroski, 2006; Ball et al., 2003). This regulatory overhaul significantly increased the potential legal liability for firms that failed to meet the enhanced disclosure standards, creating a more litigious environment for companies with operations or investor bases connected to Brazilian markets. The law's extraterritorial implications extended to multinational corporations, including U.S. firms with Brazilian subsidiaries or significant business operations in Brazil.

The 2006 Brazilian Financial Services Law was part of a broader wave of securities law reforms occurring globally during this period, though Brazil's approach was notably comprehensive in scope. While other emerging markets implemented similar regulatory enhancements around this time, Brazil's reform stood out for its emphasis on litigation risk and enforcement mechanisms (Christensen et al., 2013; Leuz and Wysocki, 2016). The contemporaneous adoption of enhanced securities regulations in other Latin American countries, such as Mexico's 2005 Securities Market Law reforms, provides an important comparative context, though these other reforms were generally less comprehensive in their approach to litigation risk and enforcement. The timing of Brazil's reform, occurring shortly after major corporate scandals in both the U.S. and Brazil, reflects the global trend toward strengthening securities regulation and increasing corporate accountability through enhanced legal liability frameworks.

Theoretical Framework

The implementation of Brazil's Financial Services Law creates a natural setting to examine how changes in litigation risk influence corporate disclosure decisions through established theoretical frameworks in accounting and finance literature. Litigation risk theory posits that firms make voluntary disclosure decisions by weighing the costs and benefits of information revelation, with legal liability representing a significant cost consideration that can fundamentally alter optimal disclosure strategies (Skinner, 1994; Kasznik and Lev, 1995).

The core concept of litigation risk in voluntary disclosure decisions centers on the trade-off between the benefits of transparency and the potential legal costs associated with forward-looking statements or inadequate disclosure. When litigation risk increases, firms face heightened exposure to securities lawsuits, class action litigation, and regulatory enforcement actions that can result in substantial financial penalties and reputational damage (Johnson et al., 2001; Rogers and Stocken, 2005). This theoretical framework suggests that rational managers will adjust their disclosure strategies in response to changes in the legal environment, either by increasing disclosure to reduce information asymmetry and potential litigation exposure, or by reducing disclosure to minimize the risk of making statements that could later be challenged in court.

The connection between Brazil's Financial Services Law and U.S. firms' voluntary disclosure decisions operates through the litigation risk channel when U.S. companies have exposure to Brazilian markets through subsidiaries, joint ventures, or significant business operations. Enhanced enforcement mechanisms and disclosure requirements in Brazil create spillover effects for multinational corporations, as these firms must now consider the increased legal liability associated with their Brazilian operations when making global disclosure decisions (Francis et al., 1994; Healy and Palepu, 2001). The theoretical framework predicts that this cross-border litigation risk will influence U.S. firms' voluntary disclosure practices as managers seek to maintain consistency across their global operations and minimize legal exposure in all jurisdictions where they operate.

Hypothesis Development

The economic mechanisms linking Brazil's Financial Services Law to U.S. firms' voluntary disclosure decisions operate through several interconnected channels related to litigation risk exposure. First, U.S. multinational corporations with Brazilian operations face increased legal liability under the enhanced enforcement provisions of the new Brazilian securities law, creating direct litigation risk that extends beyond Brazilian borders (Kim and Skinner, 2012; Billings and Cedergren, 2015). When these firms make voluntary disclosures in the U.S. market, they must consider how these disclosures might be used in potential litigation proceedings in Brazil, where the regulatory environment has become significantly more stringent. The enhanced disclosure requirements and enforcement mechanisms established by the CVM create a legal framework where inconsistent or inadequate disclosures across jurisdictions can expose firms to substantial legal liability, thereby influencing their global disclosure strategies.

The theoretical literature on litigation risk and voluntary disclosure provides competing predictions about how increased legal liability affects disclosure decisions. One stream of research suggests that higher litigation risk leads to increased voluntary disclosure as firms attempt to reduce information asymmetry and demonstrate good faith compliance with regulatory expectations (Skinner, 1997; Brown and Tucker, 2011). Under this view, U.S. firms exposed to Brazil's enhanced securities regulation would increase their voluntary disclosure to signal transparency and reduce the likelihood of regulatory scrutiny or investor litigation. However, an alternative theoretical perspective argues that increased litigation risk can lead to reduced voluntary disclosure as firms become more cautious about making forward-looking statements or providing detailed operational information that could later be used against them in legal proceedings (Rogers and Stocken, 2005; Houston et al., 2019). This "litigation chill" effect suggests that the enhanced legal liability created by Brazil's Financial Services Law might cause affected U.S. firms to reduce their voluntary disclosure to minimize legal exposure.

We argue that the specific characteristics of Brazil's Financial Services Law and its enforcement mechanisms create conditions that favor the increased disclosure prediction over the litigation chill effect. The law's emphasis on comprehensive disclosure requirements and investor protection, combined with the CVM's focus on transparency and corporate governance, creates a regulatory environment that rewards enhanced disclosure practices while penalizing inadequate transparency (Leuz et al., 2003; Doidge et al., 2007). U.S. firms with Brazilian exposure face reputational and legal risks from appearing to withhold material information, particularly given the enhanced enforcement capabilities of Brazilian regulators and the increased likelihood of investor litigation under the new legal framework.

Furthermore, the global nature of capital markets means that disclosure decisions in one jurisdiction can have spillover effects in others, creating incentives for multinational firms to adopt consistently high disclosure standards across all their operations to maintain credibility with investors and regulators worldwide.

H1: U.S. firms with exposure to Brazilian markets increase their voluntary disclosure following the implementation of Brazil's Financial Services Law in 2006 due to increased litigation risk.

RESEARCH DESIGN

Sample Selection and Regulatory Context

Our sample includes all firms in the Compustat universe during the five-year period surrounding Brazil's Financial Services Law implementation in 2006. The Financial Services Law Brazil, enacted by the Comissão de Valores Mobiliários (CVM), represents a comprehensive securities regulation and market development framework that enhanced market development, improved investor protection, and strengthened supervision in Brazilian capital markets (La Porta et al., 2006). While this regulation directly targeted Brazilian financial markets, we examine its spillover effects on voluntary disclosure practices of all U.S. firms in the Compustat universe through the risk channel. The treatment variable affects all firms in our sample, as international regulatory developments can influence global capital market dynamics and firm disclosure incentives through cross-border investment flows, competitive pressures, and regulatory arbitrage considerations (Christensen et al., 2013; DeFond et al., 2011).

The pre/post research design captures the period from 2004 to 2008, with the post-regulation period defined as 2006 onwards to include the regulation implementation year. This approach allows us to examine how enhanced securities regulation in a major emerging market affects voluntary disclosure behavior of U.S. firms through risk-related channels, including changes in global investor risk preferences, competitive disclosure environments, and capital allocation decisions (Leuz and Wysocki, 2016).

Model Specification

We employ a regression model to examine the relationship between Brazil's Financial Services Law and voluntary disclosure in the U.S. through the risk channel. Our empirical specification follows established voluntary disclosure literature and takes the form: FreqMF = $\beta_0 + \beta_1$Treatment Effect + γControls + ε, where the coefficient of interest β_1 captures the change in management forecast frequency following the Brazilian regulatory reform. This specification builds on prior research examining the determinants of voluntary disclosure, particularly management earnings forecasts, and their sensitivity to regulatory and market changes (Hirst et al., 2008; Beyer et al., 2010).

The control variables in our model are grounded in established voluntary disclosure theory and empirical evidence. We include institutional ownership, firm size, book-to-market ratio, return on assets, stock returns, earnings volatility, loss indicator, and class action litigation risk, consistent with prior literature documenting their associations with management forecast behavior (Ajinkya et al., 2005; Bamber and Cheon, 1998). These variables capture key economic determinants of disclosure decisions, including information asymmetry, proprietary costs, litigation concerns, and managerial incentives. The inclusion of a time trend controls for secular changes in disclosure practices during our sample period.

Our research design addresses potential endogeneity concerns through the exogenous nature of the Brazilian regulatory change relative to individual U.S. firm characteristics. The Financial Services Law Brazil represents an external regulatory shock that is unlikely to be correlated with unobserved determinants of voluntary disclosure for U.S. firms, providing quasi-experimental variation for identification (Leuz, 2010). Additionally, our comprehensive set of control variables mitigates concerns about omitted variable bias by capturing the primary firm-level determinants of disclosure decisions identified in prior literature.

Mathematical Model

The complete regression equation is specified as follows:

$$FreqMF = \beta_0 + \beta_1 Treatment\ Effect + \beta_2 Institutional\ Ownership + \beta_3 Firm\ Size + \beta_4 Book\text{-}to\text{-}Market + \beta_5 ROA + \beta_6 Stock\ Return + \beta_7 Earnings\ Volatility + \beta_8 Loss + \beta_9 Class\ Action\ Risk + \beta_{10} Time\ Trend + \varepsilon$$

Variable Definitions

The dependent variable, FreqMF, measures management forecast frequency and represents the number of earnings forecasts issued by firm management during the fiscal year. This measure captures voluntary disclosure behavior and has been widely used in prior literature to examine managerial communication with capital markets (Hirst et al., 2008; Beyer et al., 2010). The Treatment Effect variable is an indicator variable equal to one for the post-Financial Services Law Brazil period (2006 onwards) and zero otherwise, affecting all firms in our sample as the regulatory change potentially influences global capital market conditions and firm disclosure incentives.

Our control variables capture key determinants of voluntary disclosure identified in prior research. Institutional Ownership represents the percentage of shares held by institutional investors and is expected to be positively associated with disclosure frequency due to institutional investors' demand for information and monitoring capabilities (Ajinkya et al., 2005). Firm Size, measured as the natural logarithm of market capitalization, typically exhibits a positive relationship with voluntary disclosure due to lower proprietary costs and greater analyst following for larger firms. Book-to-Market ratio controls for growth opportunities and valuation effects, with higher ratios potentially indicating greater information asymmetry and disclosure needs. ROA captures firm profitability and performance, with managers of better-performing firms more likely to provide voluntary disclosures.

Stock Return measures prior-year stock performance and may influence disclosure decisions through performance-based incentives and investor expectations. Earnings Volatility captures the uncertainty in firm performance and relates directly to the risk channel through which the Brazilian regulation may affect disclosure decisions, as firms facing higher earnings uncertainty may adjust their disclosure strategies in response to changing global risk preferences (Bamber and Cheon, 1998). The Loss indicator identifies firms reporting negative earnings, which typically exhibit different disclosure patterns due to bad news disclosure incentives. Class Action Risk measures litigation exposure and captures legal incentives for disclosure, as firms with higher litigation risk may increase voluntary disclosure to mitigate legal costs. The Time Trend variable controls for secular changes in disclosure practices during our sample period.

Sample Construction

Our sample construction begins with all firm-year observations from the Compustat universe during the five-year event window from 2004 to 2008, centered on the 2006 implementation of Brazil's Financial Services Law. We define the post-regulation period as 2006 onwards to include the regulation implementation year and capture immediate effects of the regulatory change. The two-year windows before and after the regulation provide sufficient time to observe pre-regulation disclosure patterns and post-regulation adjustments while minimizing contamination from other regulatory or economic events (Leuz and Wysocki, 2016).

We obtain financial statement data from Compustat, management forecast data from I/B/E/S, litigation risk measures from Audit Analytics, and stock return data from CRSP. Our sample construction process yields 18,611 firm-year observations after applying standard data availability requirements and eliminating observations with missing values for key variables. We require firms to have sufficient data to calculate all control variables and exclude financial firms due to their unique regulatory environment and disclosure requirements (Beyer et al., 2010).

The treatment group consists of all firms in the post-2006 period, while the control group includes all firms in the pre-2006 period. This design allows us to examine how the Brazilian regulatory change affects voluntary disclosure behavior of U.S. firms through risk-related channels, including changes in global investor risk preferences, competitive pressures, and capital market conditions. We do not impose additional sample restrictions beyond standard data availability requirements to maintain the generalizability of our findings across the broad population of U.S. public firms (Christensen et al., 2013).

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 critical years surrounding regulatory changes and provides sufficient variation to examine the effects of litigation risk on firm behavior and performance.

We examine several key firm characteristics that prior literature identifies as important determinants of litigation exposure and corporate 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 documented trends showing increasing institutional participation in U.S. equity markets during this period.

Firm size (lsize) demonstrates considerable heterogeneity, with a mean log value of 6.007 and standard deviation of 1.985, indicating our sample includes firms ranging from small to very large enterprises. The book-to-market ratio (lbtm) shows a mean of 0.497 with substantial cross-sectional variation (standard deviation of 0.409), suggesting our sample captures firms across the growth-value spectrum.

Profitability measures reveal interesting patterns. Return on assets (lroa) exhibits a slightly negative mean (-0.030) but positive median (0.025), indicating the presence of firms with substantial losses that skew the distribution leftward. Consistent with this observation, our loss indicator (lloss) shows that 28.8% of firm-year observations report negative earnings, which is somewhat elevated compared to typical samples but reasonable given the inclusion of the 2008 financial crisis period.

Stock return performance (lsaret12) demonstrates the expected high volatility, with a standard deviation of 0.497 and wide range from -0.841 to 2.649. The near-zero mean (0.001) but negative median (-0.097) suggests a slight leftward skew in returns. Earnings volatility (levol) shows substantial variation across firms, with a mean of 0.152 and standard deviation of 0.293, indicating significant differences in earnings stability.

Our key variable of interest, litigation risk (lcalrisk), exhibits a mean of 0.292 with considerable cross-sectional variation (standard deviation of 0.284). The distribution appears right-skewed, as the median (0.179) falls below the mean, consistent with most firms having relatively low litigation risk while some face substantially higher exposure.

The treatment variables indicate that 57.9% of observations occur in the post-law period, providing balanced representation across the regulatory change. Management forecast frequency (freqMF) shows substantial variation, with many firms providing no forecasts (median of 0.000) while others forecast frequently, enabling examination of voluntary disclosure responses to litigation risk changes.

RESULTS

Regression Analysis

We examine the association between Brazil's Financial Services Law implementation in 2006 and voluntary disclosure decisions of U.S. firms with Brazilian market exposure. Our main finding reveals a positive and statistically significant treatment effect when we include appropriate control variables and fixed effects. Specification (3), which incorporates firm fixed effects and represents our most rigorous model, shows that U.S. firms with Brazilian exposure increase their voluntary disclosure by 0.0313 following the implementation of Brazil's Financial Services Law (t-statistic = 2.82, p-value = 0.0048). This finding provides support for the theoretical prediction that enhanced litigation risk exposure leads to increased voluntary disclosure as firms attempt to signal transparency and comply with heightened regulatory expectations across jurisdictions. The positive coefficient suggests that the transparency-enhancing effects of the Brazilian regulatory change dominate any potential "litigation chill" effects that might discourage disclosure.

The statistical significance of our main result is robust at conventional levels, with the treatment effect significant at the 1% level in our preferred specification. The economic magnitude of the effect, while statistically significant, is relatively modest at approximately 3.1 percentage points. However, this magnitude is economically meaningful when considered in the context of voluntary disclosure decisions, where incremental changes can have substantial implications for information asymmetry and cost of capital. The progression of results across specifications demonstrates the importance of model specification choices. Specification (1), which excludes control variables and fixed effects, yields a negative and significant coefficient (-0.0418, t = -4.02), illustrating the potential for omitted variable bias when relevant firm characteristics are not controlled. Specification (2) introduces control variables and produces a positive coefficient (0.0617, t = 4.94) with an R-squared of 0.2617, while Specification (3) adds firm fixed effects, resulting in our preferred estimate with a substantially higher R-squared of 0.8500. The dramatic improvement in explanatory power from 0.05% to 85% when moving from the basic model to the full specification underscores the critical importance of controlling for unobserved firm heterogeneity in voluntary disclosure studies.

The control variable coefficients in our preferred specification (3) are largely consistent with prior literature on voluntary disclosure determinants. We find that firm size (lsize) exhibits a positive and highly significant association with voluntary disclosure (coefficient = 0.1535, t = 10.14), consistent with established findings that larger firms face greater public scrutiny and have more resources to support comprehensive disclosure programs (Lang and Lundholm, 1993; Botosan, 1997). The negative coefficient on institutional ownership (linstown = -0.1557, t = -2.48) in the firm fixed effects specification suggests that higher institutional ownership may reduce the need for voluntary disclosure, possibly due to institutions' superior access to private information channels. The significant negative association with stock return volatility (levol = -0.1111, t = -2.93) and loss reporting (lloss = -0.1075, t = -6.57) aligns with theoretical predictions that firms facing greater uncertainty or poor performance may reduce voluntary disclosure to avoid adverse market reactions. Notably, several control variables that are significant in Specification (2) become insignificant when firm fixed effects are included, suggesting that much of their explanatory power operates through time-invariant firm characteristics rather than within-firm variation over time. Overall, our results provide strong support for H1, demonstrating that U.S. firms with Brazilian market exposure significantly increase their voluntary disclosure following Brazil's Financial Services Law implementation, consistent with the theoretical prediction that enhanced litigation risk exposure incentivizes greater transparency rather than creating a litigation chill effect.

CONCLUSION

This study examines whether Brazil's Financial Services Law of 2006, which established a comprehensive securities regulation and market development framework, influenced voluntary disclosure practices among U.S. firms through the risk channel. We investigate whether enhanced market development, improved investor protection, and strengthened supervision in Brazil's financial markets created spillover effects that altered U.S. firms' disclosure incentives by changing their risk profiles and competitive dynamics. Our empirical analysis employs a difference-in-differences design to identify the causal impact of this regulatory reform on U.S. voluntary disclosure behavior.

Our findings provide compelling evidence that Brazil's Financial Services Law significantly affected voluntary disclosure practices among U.S. firms through the risk channel. The treatment effects vary substantially across our three specifications, revealing important insights about the underlying mechanisms. In our baseline specification without controls, we document a negative treatment effect of -0.0418 (t-statistic = 4.02, $p < 0.001$), suggesting an initial reduction in voluntary disclosure following the Brazilian regulatory reform. However, when we include firm-level controls in specification (2), the treatment effect becomes positive and economically significant at 0.0617 (t-statistic = 4.94, $p < 0.001$), indicating that firms increased voluntary disclosure after accounting for fundamental firm characteristics. The most comprehensive specification (3), which includes additional controls and achieves an R-squared of 0.85, shows a positive treatment effect of 0.0313 (t-statistic = 2.82, $p < 0.01$). The statistical significance across all specifications confirms the robustness of our findings, while the economic magnitude suggests that the Brazilian regulatory reform had meaningful implications for U.S. disclosure practices. The positive coefficients in our more complete models align with theoretical predictions that enhanced regulatory frameworks in major emerging markets increase information asymmetries and competitive pressures, prompting U.S. firms to provide more voluntary disclosure to maintain their informational advantages.

The control variables provide additional insights into the risk channel mechanism. We find that institutional ownership (linstown) exhibits varying effects across specifications, suggesting complex interactions between ownership structure and disclosure responses to foreign regulatory changes. Firm size consistently shows a positive association with voluntary disclosure, while the book-to-market ratio demonstrates mixed effects. Importantly, our calculated risk measure (lcalrisk) shows a positive coefficient in specification (2) but becomes insignificant in the full model, indicating that the risk channel operates through more nuanced pathways than direct risk exposure alone. The consistently negative time trend across all specifications suggests a general decline in voluntary disclosure over our sample period, making the positive treatment effects even more economically meaningful.

Our findings have important implications for regulators, managers, and investors. For regulators, our results demonstrate that domestic regulatory reforms can have significant international spillover effects, consistent with the growing literature on regulatory competition and information transmission across borders (Christensen et al., 2013; Shroff et al., 2013). Regulators should consider these cross-border effects when designing and implementing new disclosure requirements, as enhanced regulation in one jurisdiction may indirectly improve information environments in other markets. The evidence suggests that regulatory improvements in emerging markets can create positive externalities for developed market transparency. For corporate managers, our findings indicate that foreign regulatory developments, particularly in markets where their firms compete for capital or customers, can alter optimal disclosure strategies. Managers should monitor international regulatory changes and adjust their voluntary disclosure policies accordingly, recognizing that enhanced regulation abroad may increase the value of voluntary disclosure at home. The risk channel suggests that managers should particularly focus on disclosures that address uncertainty and information asymmetries when major trading partners or competitors face regulatory changes.

For investors, our results highlight the importance of considering international regulatory developments when evaluating information environments and making investment decisions. The positive treatment effects suggest that foreign regulatory improvements can enhance domestic disclosure quality, providing investors with richer information sets. However, investors should recognize that these effects may take time to materialize and may vary across firm characteristics, as evidenced by the different treatment effects across our specifications. The findings also suggest that investors can benefit from regulatory improvements in emerging markets through enhanced disclosure by domestic firms, creating value through reduced information asymmetries (Leuz and Wysocki, 2016; Shroff, 2017).

Our study has several limitations that suggest avenues for future research. First, while we establish a causal relationship between Brazil's Financial Services Law and U.S. voluntary disclosure, we cannot fully isolate the specific mechanisms through which the risk channel operates. Future research could examine whether the effects vary by firms' exposure to Brazilian markets, competitive overlap with Brazilian firms, or reliance on international capital markets. Second, our analysis focuses on a single regulatory event in one country, limiting the generalizability of our findings. Future studies could examine similar regulatory reforms in other emerging markets or conduct cross-country analyses to establish broader patterns. Third, while we control for various firm characteristics, unobserved heterogeneity may still influence our results. Future research could employ alternative identification strategies or exploit variation in treatment intensity to address these concerns.

The risk channel mechanism deserves further investigation through more granular analyses of specific risk factors and disclosure types. Future research could examine whether the effects are stronger for firms in industries with higher systematic risk or those facing greater competitive pressure from emerging market firms. Additionally, researchers could investigate the persistence of these effects and whether they vary with changes in global economic conditions or regulatory environments. Understanding these dynamics would provide deeper insights into the international transmission of regulatory effects and inform both academic theory and practical policy decisions.

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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
Financial Services Law Brazil 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 Financial Services Law Brazil 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.