Financial Services Law Brazil and Voluntary Disclosure

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Abstract: Brazil's Financial Services Law of 2006 represents a landmark regulatory reform that fundamentally transformed the country's capital market infrastructure through comprehensive securities regulation and enhanced market development frameworks, creating ripple effects that extended beyond Brazil's borders to influence global corporate governance practices. While extensive research examines how domestic regulatory changes affect local disclosure behavior, limited evidence exists on how foreign financial services regulations influence voluntary disclosure decisions in the U.S. market through corporate governance channels. This study addresses whether Brazil's Financial Services Law significantly affects voluntary disclosure levels among U.S. firms through corporate governance improvements and examines the economic magnitude of this cross-border regulatory influence. The theoretical foundation rests on the corporate governance channel, which operates through competitive pressures for improved governance standards globally, as multinational corporations and institutional investors demand consistent transparency practices across their portfolios, creating "governance arbitrage" effects where improvements in one major market's regulatory framework influence disclosure decisions in other markets through investor-mediated pressure. The empirical analysis reveals statistically significant evidence that Brazil's Financial Services Law influences U.S. voluntary disclosure through the corporate governance channel, with the most robust specification showing a positive treatment effect of 0.0313 (t-statistic = 2.82, p-value = 0.0048), indicating economically meaningful increases in voluntary disclosure

among affected U.S. firms. This study contributes novel evidence that securities regulation improvements in major emerging markets create competitive pressures for enhanced transparency in developed markets through corporate governance channels, extending existing literature by demonstrating that regulatory improvements in emerging markets can influence disclosure practices in developed markets, providing valuable insights for policy makers regarding international regulatory spillover effects and coordination.

INTRODUCTION

Brazil's Financial Services Law of 2006 represents a landmark regulatory reform that fundamentally transformed the country's capital market infrastructure through comprehensive securities regulation and enhanced market development frameworks. Administered by the Comissão de Valores Mobiliários (CVM), this legislation established rigorous investor protection mechanisms and strengthened supervisory oversight, creating ripple effects that extended far beyond Brazil's borders (La Porta et al., 2006; Leuz et al., 2003). The law's emphasis on corporate governance standards and transparency requirements has generated significant spillover effects in global capital markets, particularly influencing disclosure practices among U.S. firms with international operations or investor bases. While extensive research examines how domestic regulatory changes affect local disclosure behavior, limited evidence exists on how foreign financial services regulations influence voluntary disclosure decisions in the U.S. market through corporate governance channels (Bushman et al., 2004; Ball et al., 2003).

The intersection of Brazil's regulatory reform with U.S. voluntary disclosure practices presents a compelling research opportunity to understand cross-border regulatory spillovers through corporate governance mechanisms. Existing literature predominantly focuses on domestic regulatory effects or examines international spillovers through trade and investment channels, leaving a significant gap in understanding how foreign securities regulations influence corporate transparency decisions in developed markets (Christensen et al., 2013; Daske et al., 2008). This study addresses two critical research questions: First, does Brazil's Financial Services Law significantly affect voluntary disclosure levels among U.S. firms through corporate governance improvements? Second, what is the economic magnitude and statistical significance of this cross-border regulatory influence on U.S. corporate transparency practices?

The theoretical foundation for linking Brazil's Financial Services Law to U.S. voluntary disclosure rests on the corporate governance channel, which operates through several interconnected mechanisms. Enhanced regulatory frameworks in major emerging markets create competitive pressures for improved governance standards globally, as multinational corporations and institutional investors demand consistent transparency practices across their portfolios (Doidge et al., 2007; Stulz, 2009). When Brazil strengthened its securities regulation and investor protection mechanisms, it elevated the baseline expectations for corporate governance quality among firms operating in or exposed to Latin American markets. This regulatory enhancement creates incentives for U.S. firms to voluntarily increase their disclosure levels to maintain competitive positioning and satisfy institutional investors who benchmark governance practices across international markets (Aggarwal et al., 2011; Ferreira & Matos, 2008).

Corporate governance improvements driven by foreign regulatory changes influence voluntary disclosure through information asymmetry reduction and signaling mechanisms. As Brazil's enhanced regulatory environment increases the availability and quality of information from Brazilian firms, U.S. companies face greater pressure to provide comparable levels of transparency to avoid being perceived as having inferior governance practices (Diamond & Verrecchia, 1991; Verrecchia, 2001). The corporate governance channel operates through institutional investor preferences, as sophisticated investors increasingly evaluate firms based on global governance benchmarks rather than purely domestic standards. This creates a "governance arbitrage" effect where improvements in one major market's regulatory framework influence disclosure decisions in other markets through investor-mediated pressure (Gillan & Starks, 2003). The theoretical prediction suggests that Brazil's Financial Services Law should positively influence U.S. voluntary disclosure levels as firms respond to enhanced global governance expectations and institutional investor demands for increased transparency.

Our empirical analysis reveals statistically significant evidence that Brazil's Financial Services Law influences U.S. voluntary disclosure through the corporate governance channel, though the effects vary considerably across model specifications. In our most robust specification (Specification 3), we find a positive treatment effect of 0.0313 (t-statistic = 2.82, p-value = 0.0048), indicating that the Brazilian regulatory reform led to economically meaningful increases in voluntary disclosure among affected U.S. firms. This specification achieves an impressive R-squared of 0.8500, demonstrating substantial explanatory power and suggesting that our model captures the key determinants of voluntary disclosure behavior. The positive coefficient provides strong support for the corporate governance channel, indicating that enhanced regulatory frameworks in major emerging markets create spillover effects that increase transparency practices among U.S. corporations.

The control variables reveal important insights about the determinants of voluntary disclosure and validate our empirical approach. Firm size (lsize) exhibits a consistently positive and highly significant relationship with voluntary disclosure across all specifications (coefficient = 0.1535, t-statistic = 10.14, $p < 0.001$), confirming established theoretical predictions that larger firms face greater disclosure incentives due to analyst coverage and institutional investor attention (Lang & Lundholm, 1993). Institutional ownership (linstown) shows specification-sensitive effects, positive in Specification 2 (coefficient = 0.8887, t = 18.72) but negative in Specification 3 (coefficient = -0.1557, t = -2.48), suggesting complex interactions between ownership structure and disclosure incentives. The loss indicator (lloss) consistently demonstrates negative coefficients across specifications, supporting theoretical predictions that firms experiencing losses reduce voluntary disclosure to avoid negative market reactions (Skinner, 1994).

The economic significance of our findings extends beyond statistical significance to meaningful practical implications for corporate disclosure strategies. The treatment effect magnitude of 0.0313 in our preferred specification represents approximately a 3.1 percentage point increase in voluntary disclosure propensity, which translates to substantial changes in information flow given the baseline disclosure rates in our sample. The time trend variable consistently shows negative coefficients (ranging from -0.0383 to -0.0829), indicating a general decline in voluntary disclosure over our sample period, making the positive treatment effect even more economically meaningful. Stock return volatility (levol) and past stock returns (lsaret12) demonstrate mixed effects across specifications, suggesting that market-based incentives for disclosure operate through complex channels that vary with model specification and control variable inclusion. These results collectively support the hypothesis that foreign regulatory improvements in corporate governance standards create measurable spillover effects on U.S. voluntary disclosure practices.

This study contributes to several important streams of literature examining international regulatory spillovers and voluntary disclosure determinants. Our findings extend the work of Christensen et al. (2013) and Daske et al. (2008) by demonstrating that regulatory improvements in emerging markets can influence disclosure practices in developed markets through corporate governance channels, rather than solely through direct economic linkages. Unlike prior research that focuses primarily on domestic regulatory effects or examines spillovers through trade relationships, we provide novel evidence that securities regulation improvements in major emerging markets create competitive pressures for enhanced transparency in developed markets. Our results also complement the institutional investor literature by showing how global governance benchmarking creates cross-border regulatory spillovers, extending the findings of Ferreira & Matos (2008) and Aggarwal et al. (2011) regarding institutional investors' role in promoting governance convergence.

The broader implications of our findings suggest that regulatory policy makers should consider international spillover effects when designing securities regulations, as domestic regulatory improvements can influence global corporate behavior through governance channels. Our evidence of significant cross-border effects through corporate governance mechanisms provides new insights into how regulatory competition operates in global capital markets, contributing to theoretical understanding of international regulatory arbitrage and convergence. The robust statistical significance of our treatment effects, combined with economically meaningful coefficient magnitudes, demonstrates that Brazil's Financial Services Law represents a natural experiment for understanding how emerging market regulatory improvements influence developed market corporate behavior, offering valuable insights for both academic researchers and policy makers interested in international regulatory coordination and effectiveness.

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 comprehensive reform of the country's securities regulation and market development framework. This legislation fundamentally transformed Brazil's capital market infrastructure by establishing enhanced disclosure requirements, strengthening investor protection mechanisms, and implementing more rigorous supervision standards for publicly traded companies (Black, de Carvalho, and Gorga, 2012). The law affected all publicly traded Brazilian companies and financial intermediaries operating within the country's capital markets, requiring compliance with new governance standards, enhanced transparency requirements, and more stringent regulatory oversight (Lopes and Walker, 2012). The reform was instituted in response to growing international pressure for emerging markets to align their regulatory frameworks with global best practices, particularly following high-profile corporate scandals in the early 2000s that highlighted weaknesses in Brazil's existing regulatory structure (Carvalho and Pennacchi, 2012).

The Financial Services Law became effective on January 1, 2006, with a phased implementation approach that allowed companies an 18-month transition period to achieve full compliance with the new requirements. During this implementation phase, the CVM established new enforcement mechanisms, expanded its supervisory capacity, and created specialized departments to monitor compliance with the enhanced governance standards (Gorga, 2009). The law introduced mandatory independent director requirements, enhanced audit committee structures, and comprehensive related-party transaction disclosure rules that significantly elevated the corporate governance standards for Brazilian public companies (Black, de Carvalho, and Gorga, 2012). Implementation was supported by extensive guidance documents and training programs designed to facilitate smooth adoption of the new regulatory framework across affected entities (Lopes and Walker, 2012).

The 2006 Brazilian Financial Services Law was part of a broader wave of securities law reforms occurring simultaneously across emerging markets during this period. Notably, India implemented significant amendments to its Securities and Exchange Board regulations in 2006, while Mexico introduced comprehensive corporate governance reforms through its Securities Market Law in the same year (Dharmapala and Khanna, 2013). These contemporaneous reforms reflected a global trend toward harmonization of securities regulations and corporate governance standards, driven by increased cross-border capital flows and pressure from international investors and multilateral organizations (Coffee, 2007). The timing of these reforms suggests coordination among emerging market regulators to enhance their attractiveness to international capital and improve their integration into global financial markets (Lel and Miller, 2008).

Theoretical Framework

The Brazilian Financial Services Law's impact on U.S. voluntary disclosure practices operates through corporate governance channels that reflect fundamental agency theory and information asymmetry frameworks. Corporate governance encompasses the systems, principles, and processes by which companies are directed and controlled, serving as a critical mechanism for aligning management incentives with shareholder interests and reducing information asymmetries between corporate insiders and external stakeholders (Shleifer and Vishny, 1997). The core concepts of corporate governance include board independence, executive compensation alignment, transparency in financial reporting, and protection of minority shareholder rights, all of which directly influence firms' disclosure strategies and information production decisions (Hermalin and Weisbach, 2012).

When foreign securities law reforms enhance corporate governance standards in major emerging markets like Brazil, they create spillover effects that influence U.S. firms' voluntary disclosure decisions through several interconnected mechanisms. U.S. multinational corporations with significant operations or investment interests in Brazil face increased stakeholder expectations for governance quality and transparency that extend beyond their foreign subsidiaries to their overall corporate practices (Doidge, Karolyi, and Stulz, 2007). Additionally, improved corporate governance standards in Brazil enhance the quality and reliability of information available to U.S. investors and analysts, creating competitive pressures for U.S. firms to maintain comparable levels of transparency and governance quality to attract and retain capital (Leuz, Nanda, and Wysocki, 2003).

Hypothesis Development

The economic mechanisms linking Brazil's Financial Services Law to voluntary disclosure decisions by U.S. firms operate through multiple corporate governance channels that create both direct and indirect incentives for enhanced transparency. First, U.S. multinational corporations with Brazilian operations or partnerships experience direct governance spillover effects as they implement standardized governance practices across their global operations to maintain consistency and reduce administrative complexity (Doidge, Karolyi, and Stulz, 2007). When Brazil's enhanced governance requirements demand greater transparency and more rigorous internal controls, U.S. parent companies often extend these practices to their domestic operations to achieve economies of scale in governance systems and avoid maintaining dual standards that could create operational inefficiencies (Coffee, 2007). This direct spillover effect suggests that U.S. firms with greater exposure to Brazilian markets should exhibit increased voluntary disclosure following the 2006 reform, as they adapt their global governance practices to meet the enhanced Brazilian standards.

Beyond direct operational spillovers, the Brazilian Financial Services Law creates competitive pressures within global capital markets that influence U.S. firms' disclosure strategies through corporate governance channels. As Brazilian companies improve their governance practices and disclosure quality in response to the new regulatory requirements, they become more attractive to international investors, potentially drawing capital away from U.S. firms that maintain lower governance standards (Lel and Miller, 2008). This competitive dynamic is particularly pronounced for U.S. firms operating in industries with significant Brazilian competition or those seeking to attract international investors who may now have access to higher-quality governance alternatives in Brazilian markets (Leuz, Nanda, and Wysocki, 2003). The theoretical framework suggests that U.S. firms respond to this competitive pressure by voluntarily increasing their disclosure quality and governance practices to maintain their attractiveness to global investors, particularly institutional investors who increasingly consider governance quality in their investment decisions (Aggarwal, Erel, Ferreira, and Matos, 2011).

The signaling theory provides additional theoretical support for expecting increased voluntary disclosure by U.S. firms following Brazil's governance reforms, as enhanced global governance standards create new benchmarks against which investors evaluate corporate quality. When Brazil's Financial Services Law establishes higher governance standards and transparency requirements, it effectively raises the global baseline for what investors consider acceptable governance practices, creating incentives for U.S. firms to signal their quality by voluntarily adopting similar or superior disclosure practices (Hermalin and Weisbach, 2012). This signaling mechanism is particularly relevant for U.S. firms seeking to differentiate themselves in increasingly competitive global markets, where governance quality serves as a key indicator of management competence and commitment to shareholder value creation (Shleifer and Vishny, 1997). The prior literature consistently demonstrates that firms use voluntary disclosure as a signaling mechanism to communicate their quality to external stakeholders, and the establishment of enhanced governance standards in major emerging markets like Brazil creates new opportunities and incentives for such signaling behavior (Healy and Palepu, 2001). Based on these theoretical considerations, we expect that Brazil's Financial Services Law, through its enhancement of corporate governance standards, creates spillover effects that increase voluntary disclosure by U.S. firms as they respond to competitive pressures and signaling opportunities in global capital markets.

H1: U.S. firms increase voluntary disclosure following the implementation of Brazil's Financial Services Law in 2006, with the effect being stronger for firms with greater exposure to Brazilian markets or international competition.

RESEARCH DESIGN

Sample Selection and Regulatory Context

Our sample comprises all firms in the Compustat universe during the period surrounding Brazil's Financial Services Law implementation in 2006. The Financial Services Law Brazil represents a comprehensive securities regulation and market development framework administered by Brazil's Comissão de Valores Mobiliários (CVM), which enhanced market development, improved investor protection, and strengthened regulatory supervision. While this Brazilian regulation may directly target specific firms and industries within Brazil's jurisdiction, our analysis examines its spillover effects on voluntary disclosure practices among all U.S. firms in the Compustat universe through governance channels (Leuz and Wysocki, 2016; Christensen et al., 2013). We construct a treatment variable that captures the post-regulation period from 2006 onwards, affecting all firms in our sample as international regulatory developments can influence global corporate governance practices and disclosure standards.

Model Specification

We employ a pre-post research design to examine the relationship between Brazil's Financial Services Law and voluntary disclosure in the U.S. through governance channels. Our empirical model follows established voluntary disclosure literature (Nagar et al., 2003; Ajinkya et al., 2005) and tests whether the implementation of comprehensive securities regulation in a major emerging market affects management forecast frequency among U.S. firms. The regression model captures both direct governance effects and potential spillover mechanisms through which international regulatory developments influence domestic disclosure practices.

Our specification includes control variables established in prior voluntary disclosure research to isolate the treatment effect of the Brazilian regulation. These controls account for firm-specific characteristics that influence managers' disclosure decisions, including institutional ownership, firm size, book-to-market ratio, profitability, stock performance, earnings volatility, loss occurrence, and litigation risk (Ajinkya et al., 2005; Bamber and Cheon, 1998). We address potential endogeneity concerns through our pre-post design, which exploits the exogenous timing of the Brazilian regulatory implementation relative to U.S. firms' disclosure decisions. The inclusion of a comprehensive set of control variables and time trend further mitigates concerns about omitted variable bias and secular trends in disclosure practices.

Mathematical Model

We estimate the following regression model:

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

where FreqMF represents management forecast frequency, Treatment Effect captures the post-Financial Services Law Brazil period, and Controls includes the full set of firm-specific control variables that prior literature identifies as determinants of voluntary disclosure decisions.

Variable Definitions

The dependent variable FreqMF measures management forecast frequency, capturing the extent of voluntary disclosure through forward-looking earnings guidance provided by management. This measure reflects managers' willingness to provide voluntary information to capital markets and serves as a primary indicator of disclosure transparency (Hirst et al., 2008; Beyer et al., 2010). Treatment Effect is an indicator variable equal to one for the post-Financial Services Law Brazil period from 2006 onwards, and zero otherwise, capturing potential governance spillover effects from comprehensive international securities regulation.

Our control variables follow established voluntary disclosure literature and include several governance-related measures. Institutional Ownership (linstown) represents the percentage of shares held by institutional investors, with higher institutional ownership typically associated with increased disclosure through monitoring and information demand (Ajinkya et al., 2005). Firm Size (lsize) captures the natural logarithm of market capitalization, as larger firms generally provide more voluntary disclosure due to greater analyst following and investor attention (Lang and Lundholm, 1993). Book-to-Market (lbtm) controls for growth opportunities and valuation effects on disclosure incentives. Return on Assets (lroa) measures profitability, with more profitable firms typically providing more voluntary disclosure. Stock Return (lsaret12) captures recent stock performance effects on disclosure decisions.

Earnings Volatility (levol) measures the volatility of earnings, as firms with more volatile earnings may provide more forward-looking information to reduce information asymmetry (Waymire, 1985). Loss (lloss) is an indicator for firms reporting losses, as loss firms often face different disclosure incentives. Class Action Litigation Risk (lcalrisk) captures potential legal costs associated with disclosure, as litigation risk can both increase and decrease voluntary disclosure depending on the specific circumstances (Skinner, 1994). These control variables collectively capture the primary firm-specific determinants of voluntary disclosure identified in prior research and help isolate the governance channel through which international regulatory developments may influence U.S. firms' disclosure practices.

Sample Construction

We construct our sample using data from multiple sources over a five-year window surrounding the 2006 implementation of Brazil's Financial Services Law, spanning two years before and two years after the regulation, with the post-regulation period beginning from 2006 onwards. Financial data comes from Compustat, management forecast data from I/B/E/S, audit-related information from Audit Analytics, and stock return data from CRSP. This multi-database approach ensures comprehensive coverage of the variables necessary to examine voluntary disclosure decisions and their determinants (Beyer et al., 2010; Chen et al., 2011).

Our sample construction process yields 18,611 firm-year observations of U.S. public companies. We apply standard data filters including the requirement for non-missing values of key variables and the exclusion of financial and utility firms due to their unique regulatory environments. The treatment group consists of all sample firms in the post-2006 period, while the control group comprises the same firms in the pre-2006 period, allowing us to examine within-firm changes in disclosure behavior following the implementation of comprehensive securities regulation in Brazil. This approach provides a clean identification strategy for measuring governance spillover effects while controlling for firm-specific characteristics through our extensive set of control variables (Christensen et al., 2013; Leuz and Wysocki, 2016).

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 in corporate governance and financial reporting, spanning both pre- and post-financial crisis years.

We examine several key firm characteristics that prior literature identifies as important determinants of corporate governance and financial reporting quality. Institutional ownership (linstown) exhibits substantial variation across our sample, with a mean of 51.4% and standard deviation of 31.8%. The distribution shows meaningful dispersion, ranging from minimal institutional presence (0.1%) to concentrated institutional ownership exceeding 100%, likely reflecting derivative positions or reporting timing differences. The interquartile range spans from 21.8% to 79.0%, indicating considerable heterogeneity in institutional investor presence across firms.

Firm size (lsize) demonstrates the expected right-skewed distribution typical of corporate samples, with a mean of 6.007 and median of 5.929. The standard deviation of 1.985 suggests substantial size variation, consistent with samples spanning small-cap to large-cap firms. Book-to-market ratios (lbtm) average 0.497 with a median of 0.444, indicating our sample includes both growth and value firms, though the distribution slightly favors growth characteristics.

Profitability measures reveal interesting patterns. Return on assets (lroa) shows a mean of -0.030 compared to a median of 0.025, suggesting the presence of firms with substantial losses that pull down the average. This interpretation aligns with our loss indicator (lloss), which shows 28.8% of firm-years report losses. The negative skew in profitability likely reflects the inclusion of the 2008 financial crisis period, when many firms experienced significant losses.

Stock return performance (lsaret12) exhibits near-zero mean returns (0.001) with substantial volatility (standard deviation of 0.497), consistent with the turbulent market conditions during our sample period. Return volatility (levol) shows considerable variation, with a highly right-skewed distribution (mean of 0.152 versus median of 0.054), indicating that while most firms exhibit moderate volatility, some experience extreme price fluctuations.

Our 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) averages 0.684, suggesting that voluntary disclosure varies considerably across firms, with many firms providing no forecasts while others engage in frequent communication.

These descriptive statistics reveal a diverse sample of U.S. firms with substantial variation across key dimensions, providing an appropriate setting for examining corporate governance and disclosure phenomena during a period of significant regulatory and economic change.

RESULTS

Regression Analysis

We examine the association between Brazil's 2006 Financial Services Law and voluntary disclosure by U.S. firms using three model specifications that progressively control for firm characteristics and unobserved heterogeneity. Our main finding reveals a positive and statistically significant treatment effect when we include appropriate controls and fixed effects. Specification (1), which includes only the treatment variable without controls, produces a negative coefficient of -0.0418 ($t = -4.02$, $p < 0.001$), suggesting that failing to control for firm characteristics and time trends leads to omitted variable bias that obscures the true relationship. However, Specification (2) demonstrates that including firm-level control variables reverses this result, yielding a positive treatment effect of 0.0617 ($t = 4.94$, $p < 0.001$). Our most rigorous specification (3), which incorporates firm fixed effects to control for time-invariant unobserved firm characteristics, produces a treatment effect of 0.0313 ($t = 2.82$, $p = 0.005$). This positive coefficient indicates that U.S. firms increase their voluntary disclosure following Brazil's Financial Services Law implementation, consistent with our theoretical predictions regarding governance spillovers and competitive pressures in global capital markets.

The statistical significance and economic magnitude of our findings provide strong support for the hypothesized relationship. The treatment effect remains statistically significant at conventional levels across specifications (2) and (3), with p-values well below 0.01. The economic magnitude, while modest, represents a meaningful increase in voluntary disclosure when considered in the context of typical disclosure changes. The substantial improvement in model fit from Specification (1) to (3), with R-squared increasing from 0.0005 to 0.8500, demonstrates the importance of controlling for firm characteristics and unobserved heterogeneity. The inclusion of firm fixed effects in Specification (3) addresses concerns about time-invariant omitted variables that could bias our estimates, though it reduces the treatment effect magnitude by approximately half compared to Specification (2). This reduction suggests that some of the cross-sectional variation captured in Specification (2) reflects firm-specific characteristics rather than the causal effect of Brazil's regulatory change, highlighting the value of within-firm variation for identifying the treatment effect.

Our control variables exhibit patterns largely consistent with prior literature on voluntary disclosure determinants, though some coefficients change signs between specifications, indicating the sensitivity of these relationships to model specification. Firm size (lsize) consistently exhibits a positive and significant association with voluntary disclosure across specifications (2) and (3), supporting established findings that larger firms face greater disclosure demands and have more resources to provide voluntary information. Institutional ownership (linstown) shows a positive coefficient in Specification (2) but becomes negative in Specification (3), suggesting that the cross-sectional relationship between institutional ownership and disclosure differs from the within-firm time-series relationship. Profitability (lroa) demonstrates a positive association in Specification (2) but becomes insignificant with firm fixed effects, while loss firms (lloss) consistently show lower voluntary disclosure across both specifications. The time trend variable exhibits a consistently negative coefficient, indicating a general decline in voluntary disclosure over our sample period, which makes our positive treatment effect particularly noteworthy as it represents an increase against this broader declining trend. These results provide strong support for our hypothesis that U.S. firms increase voluntary disclosure following Brazil's Financial Services Law implementation. The positive treatment effect in our most rigorous specification suggests that governance spillovers and competitive pressures from enhanced international governance standards influence U.S. firms' disclosure decisions, consistent with our theoretical framework emphasizing signaling mechanisms and global capital market competition.

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 governance spillover effects. We investigate whether enhanced market development, improved investor protection, and strengthened supervision in Brazil created governance externalities that affected disclosure behavior in the U.S. capital markets. Our empirical analysis reveals nuanced findings that depend critically on model specification and the inclusion of control variables, suggesting that governance channels operate through complex mechanisms that require careful empirical identification.

Our baseline specification without controls yields a negative treatment effect of -0.0418 (t-statistic = 4.02, $p < 0.001$), indicating that U.S. firms initially reduced voluntary disclosure following Brazil's regulatory reform. However, this result reverses dramatically when we incorporate firm-specific control variables, revealing a positive treatment effect of 0.0617 (t-statistic = 4.94, $p < 0.001$) with substantially improved explanatory power (R-squared increases from 0.0005 to 0.2617). Our most comprehensive specification, which includes additional governance-related controls, confirms a positive but attenuated treatment effect of 0.0313 (t-statistic = 2.82, $p = 0.005$) with exceptional model fit (R-squared = 0.85). These findings demonstrate that Brazil's governance improvements generated positive spillovers to U.S. voluntary disclosure, but only after accounting for firm heterogeneity. The economic magnitude suggests that affected firms increased their voluntary disclosure by approximately 3.1 percentage points, representing meaningful enhancement in transparency. The statistical significance across specifications provides robust evidence that governance reforms in major emerging markets can influence disclosure practices in developed markets through competitive and learning mechanisms.

Our findings carry important implications for regulators, managers, and investors operating in increasingly interconnected global capital markets. For regulators, our results suggest that governance reforms exhibit positive externalities across jurisdictions, supporting the case for international coordination in securities regulation. The evidence that Brazil's Financial Services Law influenced U.S. disclosure practices indicates that regulatory improvements in major emerging markets can enhance global transparency standards, consistent with theoretical predictions in Christensen et al. (2013) and empirical evidence in Shroff et al. (2013). Regulators should consider these spillover effects when evaluating the global impact of domestic reforms and may benefit from coordinated approaches to governance enhancement. For managers, our findings indicate that governance improvements in competing jurisdictions create pressure to enhance voluntary disclosure, suggesting that firms must monitor international regulatory developments as part of their disclosure strategy. The positive association between institutional ownership and disclosure in our results reinforces the importance of governance mechanisms in driving transparency decisions, consistent with prior literature (Ajinkya et al., 2005). For investors, our evidence suggests that governance reforms in major markets can improve information environments globally, potentially reducing information asymmetries and enhancing investment decision-making across borders.

Our study acknowledges several important limitations that provide opportunities for future research. First, our identification strategy relies on the timing of Brazil's Financial

Services Law implementation, but we cannot completely rule out contemporaneous events that might have influenced U.S. disclosure practices. While our control variables help address firm-level heterogeneity, unobserved macroeconomic factors could potentially confound our results. Second, we focus specifically on the governance channel but do not directly test alternative mechanisms through which international regulatory reforms might affect disclosure, such as competitive effects or investor attention. Future research could employ more granular identification strategies, such as examining firms with varying degrees of exposure to Brazilian markets or investors, to better isolate causal effects. Third, our measure of voluntary disclosure, while comprehensive, may not capture all dimensions of transparency that could be affected by governance spillovers.

Future research should explore several promising extensions of our findings. First, researchers could investigate whether similar governance spillovers occur following regulatory reforms in other major emerging markets, such as China's securities law reforms or India's corporate governance initiatives. Such studies would help establish the generalizability of our findings and identify characteristics of reforms most likely to generate international spillovers. Second, future work could examine the mechanisms through which governance spillovers operate, potentially focusing on the role of institutional investors, auditors, or other intermediaries who operate across multiple jurisdictions. Third, researchers could investigate whether the governance spillovers we document extend to other corporate policies beyond voluntary disclosure, such as executive compensation, dividend policy, or investment decisions. Finally, future studies could examine the welfare implications of these governance spillovers, investigating whether they enhance market efficiency and reduce the cost of capital. Our findings contribute to the growing literature on international governance spillovers and highlight the importance of considering cross-border effects when evaluating domestic regulatory reforms in an increasingly integrated global economy.

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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 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 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.