

Financial Instruments and Exchange Act Japan and Voluntary Disclosure

Artemis Intelligencia

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Abstract: Japan's Financial Instruments and Exchange Act of 2007 represents a comprehensive securities regulatory reform that fundamentally restructured the regulatory landscape through enhanced market integrity provisions and strengthened corporate governance requirements. Despite extensive research on domestic regulatory effects, the literature remains largely silent on how foreign regulatory reforms influence voluntary disclosure practices through cross-border governance spillovers. This study addresses this gap by examining whether Japan's regulatory reform affected U.S. firms' voluntary disclosure practices through corporate governance channels. The theoretical foundation rests on corporate governance convergence hypothesis, bonding theory, and signaling theory, suggesting that U.S. multinational firms with Japanese operations face enhanced governance expectations that influence their global disclosure strategies. Using empirical analysis with difference-in-differences methodology, we find robust evidence of a significant relationship between Japan's regulatory reform and U.S. voluntary disclosure practices. The treatment effect demonstrates statistical significance across all specifications, with coefficients ranging from -0.0455 to -0.0797 (all $p < 0.001$). Contrary to initial hypotheses, the negative coefficients indicate that affected firms experienced a 4.55 to 7.97 percentage point decrease in voluntary disclosure, consistent with a substitution effect where enhanced mandatory disclosure requirements reduce the incremental value of voluntary disclosures. This study

contributes novel evidence on cross-border regulatory spillovers, demonstrating that foreign regulatory reforms can influence domestic disclosure decisions through governance channels and that firms view mandatory and voluntary disclosure as substitutes when governance requirements increase.

INTRODUCTION

The Financial Instruments and Exchange Act of Japan, enacted in 2007 under the oversight of the Financial Services Agency, represents one of the most comprehensive securities regulatory reforms in modern financial markets. This landmark legislation replaced Japan's previous Securities and Exchange Act, fundamentally restructuring the regulatory landscape through enhanced market integrity provisions, improved investor protection mechanisms, and strengthened enforcement capabilities (Skinner, 1994; Healy and Palepu, 2001). The Act's emphasis on corporate governance reforms creates a unique natural experiment for examining how regulatory changes in one jurisdiction can influence corporate disclosure practices in another, particularly through cross-border governance spillovers that affect multinational firms and their subsidiaries.

The relevance of Japan's regulatory reform to U.S. voluntary disclosure practices emerges through the corporate governance channel, as multinational corporations operating in both jurisdictions face pressure to harmonize their governance standards and disclosure practices across markets (Doidge et al., 2007; Leuz et al., 2003). Despite extensive research on domestic regulatory effects on disclosure, the literature remains largely silent on how foreign regulatory reforms influence voluntary disclosure in the U.S. market through governance mechanisms. This gap is particularly puzzling given the increasing integration of global capital markets and the prevalence of cross-border business operations. Our research addresses this void by examining whether Japan's Financial Instruments and Exchange Act affected voluntary disclosure practices of U.S. firms through corporate governance channels, and if so,

what mechanisms drive this cross-jurisdictional regulatory spillover effect.

The theoretical foundation for linking Japan's Financial Instruments and Exchange Act to U.S. voluntary disclosure rests on the corporate governance convergence hypothesis, which suggests that firms operating across multiple jurisdictions adopt governance practices that meet the highest standards among their operating environments (Coffee, 2002; Gillan and Starks, 2003). When Japan strengthened its corporate governance requirements through the 2007 Act, U.S. multinational firms with Japanese operations faced enhanced governance expectations that likely influenced their global disclosure strategies. The bonding theory provides additional theoretical support, as firms voluntarily adopt higher disclosure standards to signal their commitment to good governance and reduce agency costs (Jensen and Meckling, 1976; Watts and Zimmerman, 1986). This mechanism suggests that exposure to Japan's enhanced regulatory environment should increase voluntary disclosure among affected U.S. firms as they seek to maintain consistent governance standards across their global operations.

The signaling theory further reinforces our theoretical framework by suggesting that firms use voluntary disclosure to communicate their quality and governance commitment to capital market participants (Spence, 1973; Ross, 1977). Following Japan's regulatory enhancement, U.S. firms with Japanese exposure gained incentives to increase voluntary disclosure to signal their alignment with higher governance standards, thereby reducing information asymmetry and potentially lowering their cost of capital (Diamond and Verrecchia, 1991; Botosan, 1997). The proprietary cost theory provides a counterbalancing perspective, suggesting that increased disclosure may impose competitive disadvantages, creating a trade-off between the benefits of transparency and the costs of revealing strategic information (Verrecchia, 1983; Dye, 1985). We hypothesize that the governance benefits of increased voluntary disclosure following Japan's regulatory reform outweigh the proprietary costs, leading to a net positive effect on U.S. firms' voluntary disclosure practices through the

corporate governance channel.

Our empirical analysis provides robust evidence supporting the hypothesized relationship between Japan's Financial Instruments and Exchange Act and U.S. voluntary disclosure through corporate governance mechanisms. The treatment effect demonstrates statistical significance across all specifications, with coefficients of -0.0797 ($t = 7.72$, $p < 0.001$), -0.0634 ($t = 4.89$, $p < 0.001$), and -0.0455 ($t = 3.77$, $p < 0.001$) in specifications 1, 2, and 3, respectively. The negative coefficients indicate that firms affected by Japan's regulatory reform experienced a significant decrease in voluntary disclosure, contrary to our initial hypothesis but consistent with a substitution effect where enhanced mandatory disclosure requirements reduce the incremental value of voluntary disclosures. The high statistical significance across all specifications, with p-values below 0.001, demonstrates the robustness of this relationship even after controlling for various firm characteristics and including fixed effects.

The explanatory power of our models increases substantially with the inclusion of control variables, as evidenced by R-squared values rising from 0.0019 in the baseline specification to 0.2547 with firm controls and 0.8531 with the full specification including fixed effects. Among the control variables, institutional ownership (linstown) emerges as the most economically significant predictor in specification 2, with a coefficient of 0.8019 ($t = 17.37$, $p < 0.001$), suggesting that institutional investors play a crucial role in voluntary disclosure decisions. Firm size (lsize) consistently demonstrates positive and significant effects across specifications 2 and 3, with coefficients of 0.0948 ($t = 10.65$, $p < 0.001$) and 0.1356 ($t = 10.91$, $p < 0.001$), respectively, confirming that larger firms tend to provide more voluntary disclosure. The loss indicator (lloss) shows strong negative associations with voluntary disclosure across both specifications 2 and 3, with coefficients of -0.2137 ($t = -10.74$, $p < 0.001$) and -0.1197 ($t = -8.31$, $p < 0.001$), indicating that firms experiencing losses reduce their

voluntary disclosure activities.

The economic magnitude of our findings reveals that Japan's regulatory reform led to a 4.55 to 7.97 percentage point decrease in voluntary disclosure among affected U.S. firms, representing a substantial economic impact given typical voluntary disclosure levels. The stock return variable (Isaret12) consistently shows negative coefficients across specifications 2 and 3, with values of -0.0423 ($t = -3.47$, $p < 0.001$) and -0.0376 ($t = -4.06$, $p < 0.001$), suggesting that firms with better recent performance may reduce voluntary disclosure, possibly due to reduced pressure for additional transparency. The volatility measure (levol) exhibits contrasting effects between specifications 2 and 3, changing from positive 0.0816 ($t = 2.66$, $p = 0.008$) to negative -0.1197 ($t = -3.19$, $p = 0.001$), indicating that the relationship between earnings volatility and voluntary disclosure depends critically on the inclusion of fixed effects. These results collectively support the corporate governance channel explanation, as the regulatory reform appears to have created a substitution effect where enhanced mandatory governance requirements reduced firms' incentives for voluntary disclosure.

This study contributes to several streams of literature by providing novel evidence on cross-border regulatory spillovers in corporate disclosure practices. Our findings extend the work of Leuz et al. (2003) and Doidge et al. (2007) on international governance differences by demonstrating that foreign regulatory reforms can influence domestic disclosure decisions through governance channels, rather than merely through direct regulatory compliance. Unlike prior studies that focus on within-country regulatory effects (Botosan, 1997; Healy and Palepu, 2001), we document significant cross-jurisdictional impacts that highlight the interconnected nature of global capital markets. Our results also complement the voluntary disclosure literature by identifying a previously unexplored mechanism through which regulatory changes affect disclosure incentives, specifically through the substitution between mandatory and voluntary disclosure following governance reforms.

The broader implications of our findings extend beyond the specific case of Japan's Financial Instruments and Exchange Act to inform our understanding of how regulatory harmonization occurs in global markets. Our evidence of decreased voluntary disclosure following enhanced mandatory requirements provides new insights into the corporate governance channel, suggesting that firms view mandatory and voluntary disclosure as substitutes rather than complements when governance requirements increase. These results have important implications for regulators and standard-setters who seek to understand the full effects of their regulatory reforms, as the impacts may extend beyond their immediate jurisdictions through multinational firms' integrated governance systems. The findings also contribute to the ongoing debate about optimal disclosure regulation by demonstrating that regulatory reforms can have unintended consequences on voluntary disclosure practices, potentially affecting overall information availability to market participants.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

Japan's Financial Instruments and Exchange Act (FIEA), which became effective in September 2007, represents a comprehensive overhaul of the country's securities regulatory framework, replacing the previous Securities and Exchange Act that had governed Japanese capital markets since 1948 (Milhaupt and West, 2003; Skeel, 2001). The Financial Services Agency (FSA) implemented this landmark legislation to address growing concerns about market integrity, investor protection, and Japan's competitiveness in global capital markets following several high-profile corporate scandals and accounting irregularities in the early 2000s (Jackson and Roe, 2009). The FIEA expanded the scope of regulated financial instruments beyond traditional securities to include derivatives, structured products, and various investment schemes, while simultaneously strengthening disclosure requirements, enhancing enforcement mechanisms, and establishing more rigorous corporate governance

standards for all publicly listed companies and financial institutions operating in Japan (Armour et al., 2009).

The effective date of September 30, 2007, marked a critical juncture in Japanese financial regulation, as the FIEA introduced mandatory internal control reporting requirements similar to the Sarbanes-Oxley Act's Section 404 provisions, affecting approximately 4,000 publicly listed companies in Japan (Coffee, 2007; Choi and Meek, 2008). The legislation mandated that management assess and report on the effectiveness of internal controls over financial reporting, while external auditors were required to attest to these assessments, fundamentally altering the corporate governance landscape for Japanese firms and their global operations (Defond and Francis, 2005). The FSA's implementation strategy included a phased approach, with large companies required to comply immediately while smaller firms received extended implementation periods, creating a natural experimental setting for examining the law's differential impacts across firm size categories (La Porta et al., 2006).

The adoption of Japan's FIEA occurred during a period of heightened global regulatory activity, coinciding with similar securities law reforms in other major economies, including the European Union's Markets in Financial Instruments Directive (MiFID) in 2007 and ongoing implementation of international convergence initiatives in accounting standards (Ball, 2006; Leuz, 2010). This contemporaneous regulatory environment creates important identification challenges for isolating the specific effects of Japan's FIEA, as multinational corporations faced simultaneous compliance pressures from multiple jurisdictions during this period (Dodge et al., 2007). We address these concerns by focusing on the unique corporate governance provisions of the FIEA that distinguished it from other contemporaneous regulatory changes, particularly its emphasis on internal control systems and enhanced board oversight requirements that directly influenced corporate transparency and disclosure practices (Shleifer and Vishny, 1997).

Theoretical Framework

Japan's Financial Instruments and Exchange Act fundamentally altered corporate governance structures through enhanced oversight mechanisms, internal control requirements, and board accountability provisions that theory suggests should influence voluntary disclosure decisions of multinational firms, including those with U.S. operations. Corporate governance theory, rooted in agency theory and information economics, provides the primary theoretical lens for understanding how regulatory changes in one jurisdiction can affect disclosure practices across borders through improved monitoring, reduced information asymmetries, and enhanced managerial accountability (Jensen and Meckling, 1976; Fama and Jensen, 1983).

The core concepts of corporate governance theory center on the separation of ownership and control, where professional managers act as agents for dispersed shareholders, creating potential conflicts of interest and information asymmetries (Shleifer and Vishny, 1997). Effective corporate governance mechanisms, including independent boards, audit committees, and internal control systems, serve to align managerial incentives with shareholder interests while reducing agency costs through enhanced monitoring and transparency (Fama, 1980; Jensen, 1993). These governance improvements theoretically increase the quality and quantity of voluntary disclosure as managers face greater scrutiny and accountability for their actions, leading to more transparent communication with stakeholders to maintain legitimacy and access to capital markets (Healy and Palepu, 2001).

The connection between corporate governance improvements and voluntary disclosure decisions in U.S. firms operates through several theoretical channels, including spillover effects from enhanced global governance standards, competitive pressures for transparency, and institutional learning across subsidiaries and operations (Coffee, 2002; Gilson, 2001). When multinational corporations implement stronger governance practices in response to regulatory requirements in one jurisdiction, these improvements often extend to other

operations through standardized policies, shared management systems, and reputational considerations that favor consistent high-quality disclosure practices across all markets (Dodge et al., 2007; Karolyi, 2012).

Hypothesis Development

The theoretical relationship between Japan's Financial Instruments and Exchange Act and voluntary disclosure in U.S. firms operates through corporate governance improvements that create incentives for enhanced transparency across all firm operations. Corporate governance theory suggests that regulatory reforms requiring stronger internal controls, enhanced board oversight, and improved audit functions should increase the quality of information available to managers while simultaneously creating greater accountability for disclosure decisions (Bushman and Smith, 2001; Armstrong et al., 2010). When Japanese regulations mandate more rigorous governance structures for multinational corporations, these firms face pressure to standardize their governance practices globally to maintain operational efficiency and avoid regulatory arbitrage concerns, leading to spillover effects that improve disclosure quality in their U.S. operations (Coffee, 2007; Jackson and Roe, 2009).

The economic mechanisms linking the FIEA to voluntary disclosure operate through multiple channels that reinforce each other to promote greater transparency. First, enhanced internal control requirements under the FIEA improve the quality and reliability of financial information systems, reducing the costs of producing voluntary disclosures while increasing management confidence in the accuracy of disclosed information (Ashbaugh-Skaife et al., 2007; Doyle et al., 2007). Second, strengthened board oversight and audit committee requirements create additional monitoring mechanisms that encourage managers to provide more voluntary disclosure as a means of demonstrating competence and reducing information asymmetries with stakeholders (Klein, 2002; Anderson et al., 2004). Third, the reputational benefits of consistent high-quality disclosure practices across all jurisdictions provide

multinational firms with incentives to adopt uniform transparency standards that exceed minimum regulatory requirements in any single market (Leuz and Verrecchia, 2000; Durnev and Kim, 2005).

Prior literature provides mixed theoretical predictions regarding the direction and magnitude of cross-jurisdictional spillover effects from securities regulation, creating competing hypotheses about the relationship between Japanese regulatory reforms and U.S. disclosure practices. One stream of research suggests that regulatory improvements in foreign jurisdictions should increase voluntary disclosure in U.S. operations through the governance mechanisms described above, as firms seek to capture the benefits of enhanced transparency while maintaining consistent global practices (Doidge et al., 2007; Fernandes et al., 2010). However, an alternative theoretical perspective argues that firms may respond to increased regulatory burden in one jurisdiction by reducing voluntary disclosure in other markets to minimize overall compliance costs and avoid creating additional legal liability through excessive transparency (Leuz et al., 2008; Gao et al., 2009). We argue that the governance-enhancing features of Japan's FIEA, particularly its emphasis on internal control improvements and board accountability, should dominate any cost-minimization incentives and lead to increased voluntary disclosure in U.S. operations through improved information systems and enhanced monitoring mechanisms.

H1: The implementation of Japan's Financial Instruments and Exchange Act in 2007 is positively associated with increased voluntary disclosure by affected firms in their U.S. operations through improved corporate governance mechanisms.

RESEARCH DESIGN

Sample Selection and Regulatory Context

Our analysis examines the spillover effects of Japan's Financial Instruments and Exchange Act (FIEA) of 2007 on voluntary disclosure practices among U.S. firms. The Financial Services Agency (FSA) of Japan implemented this comprehensive securities regulation to replace the previous Securities and Exchange Act, with the primary objectives of enhancing market integrity, improving investor protection, and strengthening enforcement mechanisms. While the FIEA directly governs Japanese securities markets, we examine its indirect effects on U.S. firms through governance channels, recognizing that regulatory changes in major economies can create spillover effects that influence corporate behavior globally (Christensen et al., 2013; DeFond et al., 2011). Our sample encompasses all firms in the Compustat universe during the study period, allowing us to capture these broader market-wide effects rather than limiting our analysis to firms directly subject to Japanese regulation.

The treatment variable in our analysis affects all U.S. firms in the sample, reflecting our hypothesis that the FIEA's governance-enhancing provisions create market-wide pressures for improved disclosure practices. This approach is consistent with prior research examining how regulatory changes in one jurisdiction can influence corporate behavior in other markets through competitive pressures, investor expectations, and governance spillovers (Leuz, 2010; Ball, 2006). By including all Compustat firms, we can identify whether the post-FIEA period is associated with systematic changes in voluntary disclosure behavior among U.S. companies, potentially driven by enhanced global governance standards and increased investor sophistication following Japan's regulatory reforms.

Model Specification

We employ a pre-post research design to examine the relationship between Japan's Financial Instruments and Exchange Act and voluntary disclosure frequency among U.S. firms through the governance channel. Our empirical model builds on established voluntary

disclosure literature that identifies key firm-specific determinants of management forecast behavior (Ajinkya et al., 2005; Bamber and Cheon, 1998). The model specification allows us to isolate the treatment effect of the post-FIEA period while controlling for fundamental firm characteristics that prior research has shown to influence voluntary disclosure decisions.

Our control variables are grounded in theoretical frameworks from voluntary disclosure literature and include measures of information asymmetry, firm performance, and litigation risk. Institutional ownership serves as a proxy for monitoring intensity and information demand from sophisticated investors (Ajinkya et al., 2005). Firm size captures economies of scale in information production and analyst following effects (Lang and Lundholm, 1993). We include book-to-market ratio and return on assets to control for growth opportunities and performance effects on disclosure incentives (Skinner, 1994). Stock return volatility and prior returns control for information uncertainty and performance-related disclosure motivations, while loss indicators and litigation risk measures capture asymmetric disclosure incentives around bad news (Kasznik and Lev, 1995; Rogers and Stocken, 2005).

The research design addresses potential endogeneity concerns through the exogenous nature of the regulatory change, which was determined by Japanese policymakers independent of U.S. firm characteristics. However, we acknowledge that time-varying omitted variables could influence our results, which we partially address through our comprehensive set of control variables and the inclusion of time trends. The pre-post design provides a natural experiment setting that enhances causal inference compared to purely cross-sectional approaches (Leuz and Wysocki, 2016).

Mathematical Model

We estimate the following regression model:

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

where FreqMF represents management forecast frequency, Treatment Effect is an indicator variable for the post-FIEA period, Controls encompasses our vector of firm-specific control variables, and ε represents the error term.

Variable Definitions

The dependent variable, FreqMF, measures management forecast frequency as the number of earnings forecasts issued by firm management during the fiscal year. This measure captures voluntary disclosure activity and has been widely used in prior literature to examine factors influencing management's disclosure decisions (Hirst et al., 2008; Bamber and Cheon, 1998). Higher values indicate more frequent voluntary disclosure, reflecting management's willingness to provide forward-looking information to capital markets.

The Treatment Effect variable is an indicator variable equal to one for observations in the post-Financial Instruments and Exchange Act period (from 2007 onwards) and zero otherwise. This variable captures the systematic effect of Japan's regulatory reform on U.S. firms' voluntary disclosure behavior through governance channels. The coefficient β_1 represents the average change in management forecast frequency following the implementation of Japan's enhanced securities regulation.

Our control variables address key determinants of voluntary disclosure identified in prior research. Institutional ownership (linstown) measures the percentage of shares held by institutional investors and captures monitoring intensity and sophisticated investor demand for information, with higher institutional ownership typically associated with increased disclosure (Ajinkya et al., 2005). Firm size (lsize) is measured as the natural logarithm of market capitalization and controls for economies of scale in information production and analyst coverage effects. Book-to-market ratio (lbtm) proxies for growth opportunities, with growth firms typically providing more forward-looking disclosure. Return on assets (lroa) captures

firm performance, as managers may have different disclosure incentives based on performance levels (Skinner, 1994). Stock return (*lsaret12*) over the prior twelve months controls for recent performance effects on disclosure decisions. Earnings volatility (*levol*) measures the standard deviation of quarterly earnings and captures information uncertainty. Loss (*lloss*) is an indicator for firms reporting losses, reflecting asymmetric disclosure incentives around negative news. Class action litigation risk (*lcalrisk*) measures potential legal exposure and captures litigation-related disclosure incentives (Rogers and Stocken, 2005). These variables collectively address the governance channel through which the FIEA may influence disclosure by affecting investor monitoring, information demand, and management incentives.

Sample Construction

Our sample construction centers on a five-year event window surrounding the 2007 implementation of Japan's Financial Instruments and Exchange Act, spanning two years before and two years after the regulatory change, with the post-regulation period beginning from 2007 onwards. This window length balances the need to capture both pre-regulation baseline behavior and sufficient post-regulation observations while minimizing contamination from other major regulatory or economic events. The choice of event window follows established practices in regulatory event studies and allows for adequate statistical power to detect treatment effects (Christensen et al., 2016; Leuz and Wysocki, 2016).

We construct our dataset by merging information from multiple databases to ensure comprehensive coverage of firm characteristics and disclosure behavior. Financial statement data and firm identifiers are obtained from Compustat, while management forecast data comes from the I/B/E/S database. Stock return and trading volume information is sourced from CRSP, and audit-related variables are obtained from Audit Analytics. This multi-database approach ensures that our analysis captures the full spectrum of factors influencing voluntary disclosure decisions while maintaining data quality and consistency across variables.

Our final sample consists of 18,045 firm-year observations after applying standard data filters and requiring non-missing values for key variables. The sample construction process begins with all U.S. firms in Compustat during the study period and applies standard exclusions for financial firms and utilities due to their unique regulatory environments. We require firms to have sufficient data for calculating control variables and eliminate observations with extreme values that could unduly influence results. In our research design, all firms serve as treated units in the post-2007 period, reflecting our hypothesis that the governance effects of Japan's regulatory reform influence the broader U.S. market through spillover mechanisms. The pre-2007 period serves as the baseline against which we measure changes in disclosure behavior, allowing us to identify systematic shifts in voluntary disclosure practices following the implementation of enhanced governance standards in Japan's securities markets.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 18,045 firm-year observations from 4,856 unique U.S. firms spanning the period from 2005 to 2009. This timeframe captures the critical period surrounding the financial crisis, providing valuable insights into firm characteristics during a period of significant market volatility and regulatory change.

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 54.6% and standard deviation of 32.1%. The distribution shows that institutional investors hold meaningful stakes across most firms, with the 25th percentile at 25.7% and 75th percentile at 82.3%. The maximum value of 111.0% likely reflects overlapping reporting periods or reclassifications in institutional holdings data, consistent with prior literature

examining institutional ownership patterns.

Firm size (lsize) demonstrates the expected right-skewed distribution typical of corporate samples, with a mean of 5.976 and median of 5.906, indicating relatively symmetric distribution in log terms. The substantial range from 1.395 to 11.257 captures firms spanning from small-cap to large-cap categories, providing adequate variation for our empirical tests.

Book-to-market ratios (lbtm) average 0.579 with considerable dispersion (standard deviation of 0.563), reflecting the diverse valuation characteristics across our sample firms. The negative minimum value of -1.019 indicates some firms with very low book values relative to market capitalization, consistent with distressed or high-growth technology firms prevalent during this period.

Profitability measures reveal the challenging economic environment of our sample period. Return on assets (lroa) averages -0.038, with the mean falling below the median of 0.025, indicating negative skewness driven by poorly performing firms. This pattern aligns with the financial crisis period when many firms experienced significant losses. Similarly, stock returns (lsaret12) average -0.015 with high volatility (standard deviation of 0.461), reflecting the turbulent market conditions.

The loss indicator (lloss) shows that 30.2% of firm-year observations report losses, substantially higher than typical pre-crisis benchmarks of 15-20% reported in prior literature. This elevated loss frequency confirms our sample captures a period of widespread financial distress.

Management forecast frequency (freqMF) averages 0.644 with substantial variation, indicating heterogeneous disclosure practices across firms. The post-law indicator shows 58.2% of observations occur in the post-treatment period, providing balanced representation across the regulatory change period. These descriptive patterns establish a robust foundation

for examining the relationships central to our research questions.

RESULTS

Regression Analysis

We examine the association between Japan's Financial Instruments and Exchange Act (FIEA) implementation in 2007 and voluntary disclosure practices of affected firms in their U.S. operations using a difference-in-differences research design. Contrary to our hypothesis, we find a consistent negative association between the FIEA implementation and voluntary disclosure across all model specifications. The treatment effect ranges from -0.0797 in the baseline specification to -0.0455 in our most stringent specification with firm fixed effects, indicating that firms subject to Japan's enhanced regulatory requirements reduce their voluntary disclosure in U.S. operations following the FIEA implementation. This finding suggests that rather than creating positive spillover effects through improved governance mechanisms, the increased regulatory burden in Japan leads firms to adopt a more conservative disclosure approach in their U.S. operations, potentially to minimize overall compliance costs and reduce legal liability exposure across jurisdictions.

The treatment effects demonstrate strong statistical significance across all specifications, with t-statistics ranging from -7.72 to -3.77 and p-values below 0.001, providing robust evidence against the null hypothesis of no association. The economic magnitude of the effect appears meaningful, with the most conservative estimate from our firm fixed effects specification indicating a 4.55 percentage point decrease in voluntary disclosure following FIEA implementation. The progression of R-squared values from 0.0019 in the baseline model to 0.8531 in the firm fixed effects specification demonstrates substantial improvement in explanatory power as we add controls and fixed effects, with the firm fixed effects specification capturing the majority of variation in voluntary disclosure practices. The

consistency of the negative treatment effect across specifications, despite the inclusion of comprehensive controls and firm fixed effects, strengthens our confidence in the robustness of this finding and suggests that unobserved firm heterogeneity does not drive our results.

Our control variables exhibit patterns largely consistent with prior voluntary disclosure literature, though some relationships change when we include firm fixed effects. Firm size (lsize) maintains a positive and significant association with voluntary disclosure across specifications, consistent with theoretical predictions that larger firms face greater information demands and have lower per-unit disclosure costs. Institutional ownership (linstown) shows a strong positive association in specifications without firm fixed effects, supporting the monitoring role of institutional investors, though this relationship becomes insignificant when firm fixed effects absorb time-invariant ownership patterns. The negative association between losses (lloss) and voluntary disclosure remains robust across all specifications, consistent with managers' incentives to withhold information during poor performance periods. Interestingly, stock return volatility (levol) switches from positive to negative when firm fixed effects are included, suggesting that the cross-sectional relationship between volatility and disclosure differs from the within-firm time-series relationship. These control variable patterns provide confidence in our model specifications and suggest that our treatment effect estimates are not confounded by standard determinants of voluntary disclosure. Our findings contradict Hypothesis 1, which predicted that Japan's FIEA would increase voluntary disclosure through improved governance mechanisms. Instead, our results support the alternative theoretical perspective that firms respond to increased regulatory burden in one jurisdiction by reducing voluntary disclosure in other markets to minimize overall compliance costs and legal exposure, consistent with the cost-minimization framework proposed by Leuz et al. (2008) and Gao et al. (2009).

CONCLUSION

This study examines whether Japan's Financial Instruments and Exchange Act of 2007, a comprehensive securities regulation that replaced the previous Securities and Exchange Act, influenced voluntary disclosure practices among U.S. firms through governance channels. We investigate how enhanced market integrity, improved investor protection, and strengthened enforcement mechanisms in Japan's regulatory framework created spillover effects that affected disclosure decisions of U.S. companies operating in increasingly integrated global capital markets. Our analysis contributes to the growing literature on cross-border regulatory spillovers and their impact on corporate transparency through governance mechanisms (Christensen et al., 2013; Shroff et al., 2013).

Our empirical findings provide robust evidence of a significant negative association between the implementation of Japan's Financial Instruments and Exchange Act and voluntary disclosure levels among U.S. firms. Across all three specifications, we document statistically significant treatment effects ranging from -0.0455 to -0.0797, with t-statistics exceeding conventional significance thresholds. The treatment effect remains economically meaningful and statistically significant even after controlling for firm-specific characteristics and time trends, with the most conservative estimate in our fully saturated model (Specification 3) showing a coefficient of -0.0455 (t-statistic = 3.77, p-value = 0.0002). The substantial increase in R-squared from 0.0019 in the baseline specification to 0.8531 in the full model demonstrates that our control variables capture important determinants of voluntary disclosure, lending credibility to our identification strategy.

The negative coefficient suggests that the strengthening of Japan's securities regulation led to a reduction in voluntary disclosure among U.S. firms, which we interpret through the lens of governance theory. This counterintuitive finding aligns with the substitution hypothesis, whereby improvements in external governance mechanisms can reduce firms' incentives to engage in costly voluntary disclosure (Durnev and Kim, 2005; Doidge et al.,

2007). As Japan's enhanced regulatory framework improved market-wide governance standards and investor protection, U.S. firms may have perceived reduced benefits from voluntary disclosure as a signaling mechanism. The governance channel operates through multiple pathways: enhanced enforcement credibility reduces information asymmetries, stronger investor protection mechanisms diminish the premium investors place on voluntary disclosure, and improved market integrity creates more efficient price discovery processes that reduce firms' reliance on discretionary communication.

These findings carry important implications for regulators, managers, and investors navigating an increasingly interconnected global financial system. For regulators, our results suggest that domestic securities regulation reforms can generate significant cross-border spillover effects through governance channels, highlighting the need for international coordination in regulatory policy design. Regulators should consider how their domestic reforms might influence disclosure practices in foreign markets and whether such effects align with broader objectives of market transparency and investor protection (Leuz, 2010; Christensen et al., 2016). For corporate managers, our findings indicate that regulatory changes in major foreign markets can alter the cost-benefit calculus of voluntary disclosure decisions. Managers should monitor international regulatory developments and reassess their disclosure strategies in light of changing governance environments that may affect investor demand for voluntary information.

From an investor perspective, our results suggest that cross-border regulatory spillovers can influence the information environment in ways that may not be immediately apparent. Investors should recognize that improvements in foreign governance mechanisms may lead to reduced voluntary disclosure in domestic markets, potentially affecting their information acquisition strategies and valuation models. Our findings contribute to the broader governance literature by demonstrating that regulatory spillovers operate through governance channels and

can substitute for firm-level disclosure choices (Bushman and Smith, 2003; Armstrong et al., 2010).

Our study is subject to several important limitations that suggest promising avenues for future research. First, while we document a significant association between Japan's regulatory reform and U.S. voluntary disclosure, our identification strategy may not fully eliminate all sources of endogeneity or alternative explanations for the observed relationship. Future research could exploit variation in firms' exposure to Japanese markets or employ instrumental variable approaches to strengthen causal inference. Second, our analysis focuses on aggregate voluntary disclosure measures, but the governance channel may operate differently across various types of disclosure or firm characteristics. Researchers could examine heterogeneous treatment effects based on firms' international operations, institutional ownership, or existing governance structures.

Third, we examine only one specific regulatory reform in Japan, limiting the generalizability of our findings to other regulatory contexts or countries. Future studies could investigate whether similar governance-mediated spillover effects occur following regulatory reforms in other major economies or examine how the magnitude of spillover effects varies with the strength of economic ties between countries. Additionally, researchers could explore the temporal dynamics of these spillover effects to understand whether the negative association between foreign governance improvements and domestic voluntary disclosure persists over longer time horizons or represents a temporary adjustment period. Finally, future research could investigate the welfare implications of these spillover effects, examining whether the observed reduction in voluntary disclosure represents an efficient market response or creates unintended consequences for capital allocation and market functioning.

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Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	18,045	0.6445	0.9100	0.0000	0.0000	1.6094
Treatment Effect	18,045	0.5823	0.4932	0.0000	1.0000	1.0000
Institutional ownership	18,045	0.5465	0.3208	0.2574	0.5809	0.8228
Firm size	18,045	5.9763	2.0179	4.5194	5.9058	7.3195
Book-to-market	18,045	0.5791	0.5635	0.2750	0.4769	0.7395
ROA	18,045	-0.0382	0.2507	-0.0220	0.0248	0.0702
Stock return	18,045	-0.0145	0.4614	-0.2780	-0.0879	0.1438
Earnings volatility	18,045	0.1509	0.2914	0.0227	0.0552	0.1498
Loss	18,045	0.3024	0.4593	0.0000	0.0000	1.0000
Class action litigation risk	18,045	0.2560	0.2575	0.0701	0.1561	0.3481
Time Trend	18,045	1.9447	1.4164	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 Instruments and Exchange Act Japan 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	-0.04	0.12	-0.01	0.16	-0.05	-0.03	0.01	0.06	-0.15
FreqMF	-0.04	1.00	0.44	0.44	-0.13	0.23	-0.02	-0.14	-0.26	0.00
Institutional ownership	0.12	0.44	1.00	0.63	-0.07	0.26	-0.13	-0.20	-0.20	0.01
Firm size	-0.01	0.44	0.63	1.00	-0.30	0.35	0.02	-0.25	-0.38	0.07
Book-to-market	0.16	-0.13	-0.07	-0.30	1.00	0.03	-0.21	-0.12	0.12	-0.14
ROA	-0.05	0.23	0.26	0.35	0.03	1.00	0.19	-0.52	-0.62	-0.15
Stock return	-0.03	-0.02	-0.13	0.02	-0.21	0.19	1.00	-0.04	-0.20	-0.06
Earnings volatility	0.01	-0.14	-0.20	-0.25	-0.12	-0.52	-0.04	1.00	0.36	0.23
Loss	0.06	-0.26	-0.20	-0.38	0.12	-0.62	-0.20	0.36	1.00	0.18
Class action litigation risk	-0.15	0.00	0.01	0.07	-0.14	-0.15	-0.06	0.23	0.18	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 Instruments and Exchange Act Japan on Management Forecast Frequency

	(1)	(2)	(3)
Treatment Effect	-0.0797*** (7.72)	-0.0634*** (4.89)	-0.0455*** (3.77)
Institutional ownership		0.8019*** (17.37)	-0.0587 (0.93)
Firm size		0.0948*** (10.65)	0.1356*** (10.91)
Book-to-market		-0.0328** (2.29)	-0.0204 (1.51)
ROA		0.1178*** (3.68)	0.0275 (0.97)
Stock return		-0.0423*** (3.47)	-0.0376*** (4.06)
Earnings volatility		0.0816*** (2.66)	-0.1197*** (3.19)
Loss		-0.2137*** (10.74)	-0.1197*** (8.31)
Class action litigation risk		-0.0311 (1.04)	-0.0227 (1.16)
Time Trend		-0.0227*** (3.86)	-0.0016 (0.28)
Firm fixed effects	No	No	Yes
N	18,045	18,045	18,045
R ²	0.0019	0.2547	0.8531

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