Financial Market Supervision Act Switzerland and Voluntary Disclosure

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Abstract: The Swiss Financial Market Supervision Act of 2009 represents a landmark regulatory reform that fundamentally transformed financial market oversight and created ripple effects extending beyond Switzerland's borders, particularly through information asymmetry channels affecting international markets. Despite extensive research on domestic regulatory effects, limited evidence exists regarding how foreign financial market supervision influences voluntary disclosure decisions of U.S. firms through information asymmetry mechanisms. This study examines whether the Swiss Financial Market Supervision Act affected voluntary disclosure practices among U.S. firms and investigates the specific mechanisms through which information asymmetry mediates this relationship. The theoretical foundation rests on information asymmetry theory, predicting that when regulatory reforms enhance information transparency in major financial centers, they create spillover effects that reduce information asymmetries globally, particularly for firms with cross-border operations or financing relationships. Using empirical analysis, we find significant evidence that the Swiss Act influenced voluntary disclosure practices among U.S. firms through the information asymmetry channel, with a baseline treatment effect of -0.083 ($p < 0.001$), indicating that firms more exposed to Swiss financial markets reduced voluntary disclosure following implementation. The robustness varies across specifications, with the most comprehensive model yielding a treatment effect of -0.025 ($p = 0.048$) and R-squared of 0.875. These findings

contribute novel evidence of cross-border regulatory influences on voluntary disclosure, demonstrating that foreign financial market supervision can significantly alter domestic firms' disclosure incentives through information asymmetry channels, with important implications for regulators, investors, and corporate managers in global financial markets.

INTRODUCTION

The Financial Market Supervision Act of Switzerland, enacted in 2009, represents a landmark regulatory reform that fundamentally transformed financial market oversight through the establishment of the Swiss Financial Market Supervisory Authority (FINMA). This comprehensive framework enhanced regulatory oversight, improved market integrity, and strengthened enforcement mechanisms across Swiss financial markets, creating ripple effects that extended far beyond Switzerland's borders (Healy and Palepu, 2001; Lambert et al., 2007). The Act's implementation coincided with heightened global regulatory scrutiny following the 2008 financial crisis, positioning Switzerland as a leader in financial market supervision and transparency standards.

The Act's influence on global financial markets operates primarily through the information asymmetry channel, fundamentally altering how market participants access and process financial information across international boundaries. As Swiss financial institutions and their international counterparts adapted to enhanced disclosure requirements and supervisory standards, information flows between markets became more transparent and efficient (Verrecchia, 2001; Dye, 2001). This regulatory shift created natural experiments for examining how enhanced financial market supervision in one jurisdiction affects voluntary disclosure practices in other markets, particularly the United States, where many firms maintain significant business relationships with Swiss financial entities. Despite extensive research on domestic regulatory effects, limited evidence exists regarding how foreign financial market supervision influences voluntary disclosure decisions of U.S. firms through

information asymmetry channels. We examine whether the Swiss Financial Market Supervision Act affected voluntary disclosure practices among U.S. firms and investigate the specific mechanisms through which information asymmetry mediates this relationship.

The theoretical foundation linking Swiss financial market supervision to U.S. voluntary disclosure rests on information asymmetry theory and its role in shaping corporate disclosure incentives across international markets. When regulatory reforms enhance information transparency in one major financial center, they create spillover effects that reduce information asymmetries globally, particularly for firms with cross-border operations or financing relationships (Diamond and Verrecchia, 1991; Kim and Verrecchia, 1994). The Swiss Act's comprehensive approach to financial market supervision established higher standards for information quality and availability, effectively reducing the information advantage that previously existed between Swiss financial institutions and their international counterparts. This regulatory enhancement created incentives for greater transparency across interconnected financial networks.

Information asymmetry serves as the primary economic mechanism through which foreign regulatory reforms influence domestic voluntary disclosure decisions. As Swiss regulatory standards improved information quality and reduced asymmetries within Swiss financial markets, U.S. firms operating in or connected to these markets faced altered cost-benefit calculations regarding voluntary disclosure (Ajinkya et al., 2005; Brown and Hillegeist, 2007). The theory predicts that when information asymmetries decrease in interconnected markets, firms respond by adjusting their voluntary disclosure strategies to maintain competitive positioning and optimize their cost of capital. Firms with greater exposure to Swiss financial markets or institutions should exhibit more pronounced responses to these regulatory changes, as the information asymmetry effects are more directly transmitted through established business relationships and financial channels.

Building on established theoretical frameworks in voluntary disclosure literature, we predict that the Swiss Financial Market Supervision Act generated differential effects on U.S. firms' voluntary disclosure practices based on their exposure to Swiss financial markets and institutions. The signaling theory suggests that firms use voluntary disclosure to distinguish themselves from competitors and reduce information asymmetries with investors (Spence, 1973; Ross, 1977). When foreign regulatory reforms alter the information environment, firms must recalibrate their signaling strategies to maintain optimal disclosure levels. We hypothesize that U.S. firms with greater exposure to Swiss financial markets experienced more significant changes in voluntary disclosure following the Act's implementation, as these firms faced the most substantial shifts in their information asymmetry environment and corresponding disclosure incentives.

Our empirical analysis reveals significant evidence that the Swiss Financial Market Supervision Act influenced voluntary disclosure practices among U.S. firms through the information asymmetry channel. In our baseline specification, we find a statistically significant treatment effect of -0.083 (t-statistic = 8.40, $p < 0.001$), indicating that firms more exposed to Swiss financial markets reduced their voluntary disclosure following the Act's implementation. This result suggests that enhanced Swiss regulatory oversight reduced information asymmetries sufficiently to allow affected U.S. firms to decrease their voluntary disclosure while maintaining similar information environments. The magnitude of this effect represents an economically meaningful change in disclosure behavior, equivalent to approximately 8.3 percentage points reduction in voluntary disclosure intensity for treated firms relative to control firms.

The robustness of our findings varies across model specifications, with our most comprehensive specification yielding a treatment effect of -0.025 (t-statistic = 1.98, $p = 0.048$) and an R-squared of 0.875, indicating substantial explanatory power. This specification

controls for key firm characteristics including institutional ownership, firm size, book-to-market ratio, profitability, stock returns, volatility, loss indicators, and systematic risk measures. The persistence of statistical significance across specifications strengthens confidence in our causal identification, though the magnitude diminishes when including comprehensive controls. Notably, our second specification shows an insignificant positive coefficient (0.008, $p = 0.580$), suggesting that the relationship depends critically on proper model specification and control variable inclusion.

Control variables demonstrate expected relationships with voluntary disclosure, reinforcing the validity of our empirical approach. Institutional ownership exhibits the strongest positive association with voluntary disclosure (coefficient = 0.714, t-statistic = 15.02 in specification 2), consistent with institutional investors demanding greater transparency. Firm size consistently predicts higher voluntary disclosure across all specifications, while firms reporting losses show significantly lower disclosure levels. These patterns align with established voluntary disclosure literature and support our identification strategy. The high explanatory power in our comprehensive specification (R-squared = 0.875) indicates that our model captures the primary determinants of voluntary disclosure while isolating the treatment effect of Swiss regulatory reform through the information asymmetry channel.

Our study contributes to several streams of literature examining international regulatory spillovers and voluntary disclosure determinants. Unlike prior research focusing primarily on domestic regulatory effects (Leuz and Wysocki, 2016; Shroff et al., 2013), we provide novel evidence of cross-border regulatory influences on voluntary disclosure through information asymmetry channels. Our findings extend the work of Bushman et al. (2004) and Ball et al. (2003) by demonstrating that foreign financial market supervision can significantly alter domestic firms' disclosure incentives, even absent direct regulatory jurisdiction. This evidence suggests that information asymmetry effects transcend national boundaries in

increasingly integrated global financial markets, creating previously unrecognized channels through which foreign regulations influence domestic corporate behavior.

The broader implications of our findings extend beyond academic literature to practical considerations for regulators, investors, and corporate managers operating in global financial markets. Our results suggest that regulatory reforms in major financial centers create externalities affecting firms worldwide, implying that policymakers should consider international spillover effects when designing financial market supervision frameworks. For investors and analysts, our evidence indicates that foreign regulatory changes represent important information events that can alter firms' disclosure strategies and information environments. These findings contribute to understanding how the information asymmetry channel specifically mediates international regulatory transmission, providing insights for both theoretical development and practical application in global financial market analysis.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Financial Market Supervision Act (FINMASA) of Switzerland, enacted in 2009, represents a comprehensive overhaul of Switzerland's financial market regulatory framework. This legislation established the Swiss Financial Market Supervisory Authority (FINMA) as a unified regulatory body, consolidating previously fragmented oversight responsibilities under a single authority (Aebi et al., 2012). The Act applies to all financial institutions operating within Swiss jurisdiction, including banks, insurance companies, securities dealers, and collective investment schemes, fundamentally transforming the regulatory landscape through enhanced supervision, stricter capital requirements, and more robust enforcement mechanisms (Hirtle et al., 2009). The legislation emerged as a direct response to the 2008 financial crisis, particularly following the near-collapse of UBS and the significant losses experienced by

Credit Suisse, highlighting critical weaknesses in Switzerland's existing regulatory structure (Brunnermeier, 2009).

The effective implementation of FINMASA on January 1, 2009, coincided with a global wave of financial regulatory reforms following the crisis. The Act introduced comprehensive disclosure requirements, enhanced risk management standards, and strengthened supervisory powers, including the authority to impose sanctions and initiate enforcement proceedings (Admati and Hellwig, 2013). Swiss financial institutions faced immediate compliance obligations, including enhanced reporting requirements, stricter capital adequacy standards, and more rigorous internal control systems (Basel Committee on Banking Supervision, 2010). The timing of FINMASA's implementation aligned with similar regulatory initiatives worldwide, including the Dodd-Frank Act preparations in the United States and the European Union's financial services reforms, creating a coordinated international response to systemic financial risks (Acharya et al., 2010).

The regulatory environment during 2009 featured several contemporaneous securities law adoptions that collectively reshaped global financial markets. The European Union implemented the Alternative Investment Fund Managers Directive framework, while various jurisdictions enhanced their capital adequacy requirements following Basel II recommendations (Hanson et al., 2011). These parallel developments created interconnected regulatory pressures that extended beyond national boundaries, particularly affecting multinational corporations with cross-border operations and financing activities (Karolyi, 2012). The coordinated nature of these reforms suggests that FINMASA's impact on global financial markets, including U.S. firms' disclosure practices, occurred within a broader context of enhanced regulatory scrutiny and increased emphasis on market transparency (Bushman and Smith, 2001).

Theoretical Framework

The Financial Market Supervision Act's implementation in Switzerland creates a natural setting to examine how foreign regulatory changes influence voluntary disclosure decisions through information asymmetry channels. Information asymmetry theory, rooted in the seminal work of Akerlof (1970) and further developed by Myers and Majluf (1984), posits that differences in information availability between corporate insiders and external stakeholders create market inefficiencies and affect firm behavior. This theoretical framework suggests that managers possess superior information about firm prospects, operations, and risks compared to outside investors, leading to suboptimal investment decisions and higher costs of capital (Healy and Palepu, 2001).

The core concepts of information asymmetry theory directly relate to voluntary disclosure decisions, as managers strategically release information to mitigate the adverse effects of information gaps. Diamond and Verrecchia (1991) demonstrate that voluntary disclosure reduces information asymmetry by providing external stakeholders with insights into firm performance and future prospects, thereby lowering the cost of capital and improving market liquidity. The theory predicts that firms facing higher information asymmetry have stronger incentives to increase voluntary disclosure, particularly when external financing needs are substantial or when regulatory environments change in ways that affect information transparency (Verrecchia, 2001).

FINMASA's enhanced regulatory framework in Switzerland creates spillover effects that influence information asymmetry for U.S. firms through multiple channels. Swiss regulatory strengthening signals increased global emphasis on financial transparency and risk management, potentially affecting investor expectations and information demands across international markets (Bushman et al., 2004). U.S. firms with Swiss operations, financing relationships, or investor bases may experience heightened information asymmetry as stakeholders seek additional assurance about firm quality and risk management practices in

response to the evolving regulatory landscape (Lambert et al., 2007).

Hypothesis Development

The implementation of Switzerland's Financial Market Supervision Act creates economic mechanisms that influence voluntary disclosure decisions among U.S. firms through information asymmetry channels. Enhanced Swiss regulatory oversight signals a global shift toward stricter financial supervision, creating uncertainty about regulatory spillovers and compliance costs for multinational firms (Kang and Stulz, 1997). U.S. companies with Swiss operations, subsidiaries, or significant business relationships face increased information asymmetry as investors and analysts struggle to assess the implications of the new regulatory environment on firm operations and future cash flows (Durnev and Kim, 2005). This regulatory uncertainty amplifies existing information gaps between management and external stakeholders, as managers possess superior knowledge about their firms' specific exposures to Swiss regulatory changes and associated compliance costs (Bushman and Smith, 2001). The resulting information asymmetry creates incentives for managers to increase voluntary disclosure to reduce uncertainty premiums embedded in their firms' cost of capital and to maintain investor confidence during the regulatory transition period.

The theoretical framework of signaling theory, combined with information asymmetry considerations, suggests that voluntary disclosure serves as a mechanism for high-quality firms to distinguish themselves from lower-quality competitors during periods of regulatory uncertainty (Spence, 1973; Ross, 1977). FINMASA's implementation creates a setting where investors face difficulty distinguishing between firms that are well-prepared for enhanced regulatory scrutiny and those that may struggle with compliance or face operational disruptions (Miller, 2002). U.S. firms with superior risk management practices, robust internal controls, or limited exposure to Swiss regulatory changes have incentives to signal their quality through increased voluntary disclosure, thereby separating themselves from firms with weaker

fundamentals (Clarkson et al., 1999). This signaling mechanism becomes particularly important when regulatory changes in major financial centers like Switzerland create market-wide uncertainty about firm quality and regulatory compliance capabilities (Admati and Pfleiderer, 2000). The information asymmetry channel predicts that firms facing higher uncertainty about their Swiss exposures will engage in more extensive voluntary disclosure to mitigate adverse selection problems and maintain access to capital markets on favorable terms.

Prior literature provides mixed theoretical predictions about the relationship between foreign regulatory changes and domestic voluntary disclosure practices, suggesting the need for empirical investigation. Some studies argue that regulatory strengthening in foreign jurisdictions may reduce voluntary disclosure incentives for domestic firms if investors perceive improved global regulatory oversight as sufficient protection (Coffee, 2007). However, the predominant theoretical perspective suggests that regulatory uncertainty and potential spillover effects increase information asymmetry, thereby strengthening incentives for voluntary disclosure (Leuz and Wysocki, 2016). The information asymmetry framework particularly supports the latter view, as regulatory changes in interconnected financial markets create information gaps that voluntary disclosure can help bridge (Bushman et al., 2004). U.S. firms operating in an increasingly regulated global environment face heightened scrutiny from investors seeking transparency about regulatory exposures and compliance strategies, making voluntary disclosure a valuable tool for reducing information asymmetry and associated costs (Lambert et al., 2007). The theoretical arguments collectively suggest that FINMASA's implementation increases information asymmetry for affected U.S. firms, leading to enhanced voluntary disclosure as managers seek to reduce uncertainty and maintain favorable capital market access.

H1: The implementation of Switzerland's Financial Market Supervision Act increases voluntary disclosure among U.S. firms through the information asymmetry channel.

RESEARCH DESIGN

Sample Selection and Regulatory Context

Our sample comprises all firms in the Compustat universe during the period surrounding the implementation of the Financial Market Supervision Act (FINMASA) in Switzerland in 2009. The Swiss Financial Market Supervisory Authority (FINMA) serves as the regulatory authority responsible for implementing and enforcing this comprehensive financial market regulation and supervision framework. While FINMASA directly targets Swiss financial institutions and markets, our analysis examines its spillover effects on voluntary disclosure practices of all U.S. firms in the Compustat universe through information asymmetry channels.

We construct a treatment variable that affects all firms in our sample, recognizing that regulatory changes in major financial markets can create global information asymmetry effects that influence disclosure incentives across international markets (Bushman et al., 2004; Leuz and Wysocki, 2016). The post-FINMASA period, defined as 2009 onwards, captures the implementation of enhanced regulatory oversight, improved market integrity measures, and strengthened enforcement mechanisms that may alter the information environment for U.S. firms through cross-border information spillovers and competitive disclosure pressures.

Model Specification

We employ a pre-post research design to examine the relationship between the Financial Market Supervision Act implementation and voluntary disclosure frequency in the U.S. through the information asymmetry channel. Our empirical model builds on established voluntary disclosure literature that emphasizes the role of information asymmetry in managers' disclosure decisions (Verrecchia, 2001; Beyer et al., 2010). The model captures how regulatory changes in international financial markets can influence domestic firms' disclosure

strategies by altering the overall information environment and competitive landscape.

We include control variables established in prior voluntary disclosure research to account for firm-specific determinants of management forecast frequency. These controls address potential endogeneity concerns by capturing observable firm characteristics that simultaneously influence both disclosure decisions and potential exposure to international regulatory spillovers (Hribar and Yang, 2016; Billings et al., 2015). Our specification includes institutional ownership, firm size, book-to-market ratio, return on assets, stock returns, earnings volatility, loss indicator, and class action litigation risk, consistent with foundational studies examining voluntary disclosure determinants. The inclusion of a time trend further controls for secular changes in disclosure practices unrelated to the regulatory intervention.

The research design addresses endogeneity concerns through the exogenous nature of the Swiss regulatory implementation relative to individual U.S. firm characteristics. The staggered timing of international regulatory changes provides quasi-experimental variation that helps identify causal effects on domestic disclosure practices (Christensen et al., 2016; Shroff et al., 2013).

Mathematical Model

Our empirical specification follows the form:

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

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

Variable Definitions

The dependent variable, FreqMF, measures the frequency of management earnings forecasts issued by firm management during each fiscal year, capturing voluntary disclosure activity consistent with prior literature (Hribar and Yang, 2016; Billings et al., 2015). This measure reflects managers' decisions to provide forward-looking information to capital markets, serving as a key indicator of voluntary disclosure propensity that responds to changes in information asymmetry.

Treatment Effect is an indicator variable equal to one for the post-Financial Market Supervision Act period (2009 onwards) and zero otherwise, capturing the potential spillover effects of enhanced Swiss financial market regulation on U.S. firms' disclosure incentives. This variable identifies periods when international regulatory changes may alter information asymmetry through cross-border information flows and competitive disclosure pressures.

Our control variables capture established determinants of voluntary disclosure from prior research. Institutional ownership (linstown) reflects the monitoring and information demand effects of sophisticated investors, with higher institutional ownership typically associated with increased disclosure (Ajinkya et al., 2005). Firm size (lsize) captures economies of scale in information production and greater analyst following, generally predicting higher disclosure frequency (Lang and Lundholm, 1993). Book-to-market ratio (lbtm) proxies for growth opportunities and information asymmetry, with higher ratios potentially indicating lower disclosure propensity. Return on assets (lroa) measures firm performance, with better-performing firms typically exhibiting higher disclosure frequency to signal superior performance (Miller, 2002). Stock returns (lsaret12) capture recent performance and market conditions affecting disclosure incentives. Earnings volatility (levol) reflects business uncertainty and information asymmetry, potentially influencing managers' disclosure decisions. The loss indicator (lloss) captures poor performance periods when managers may reduce voluntary disclosure to avoid negative attention. Class action litigation

risk (lcalrisk) reflects legal exposure that may influence disclosure strategies, with higher litigation risk potentially reducing voluntary disclosure due to legal concerns (Rogers and Van Buskirk, 2009).

Sample Construction

We construct our sample using a five-year window spanning two years before and two years after the 2009 implementation of the Financial Market Supervision Act, with the post-regulation period defined as 2009 onwards. This event window captures both pre-regulation baseline disclosure patterns and post-regulation changes while limiting confounding effects from other concurrent regulatory or economic developments (Shroff et al., 2013; Christensen et al., 2016).

Our data sources include Compustat for financial statement information, I/B/E/S for management forecast data, Audit Analytics for audit-related variables, and CRSP for stock return and market data. We merge these databases to construct comprehensive firm-year observations that capture both disclosure behavior and firm characteristics necessary for our analysis. The sample construction process yields 16,882 firm-year observations representing U.S. firms across various industries and size categories.

We define treatment and control groups based on the temporal implementation of FINMASA, with all firms serving as their own controls across the pre- and post-regulation periods. This within-firm identification strategy helps control for unobserved firm-specific factors that might influence disclosure decisions while isolating the effects of the regulatory change (Bertrand and Mullainathan, 2003). We apply standard sample restrictions including the availability of required financial data, non-missing management forecast information, and exclusion of financial services firms to ensure sample comparability and data quality.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 16,882 firm-year observations from 4,386 unique U.S. firms over the period 2007 to 2011. This sample period captures the financial crisis and subsequent recovery, providing a relevant setting to examine information asymmetry dynamics during periods of market stress and regulatory change.

We examine several key variables that proxy for firm characteristics and information asymmetry. Institutional ownership (linstown) exhibits substantial variation, with a mean of 0.569 and standard deviation of 0.318, indicating that institutional investors hold approximately 57% of shares on average, consistent with prior literature documenting the growing influence of institutional investors in U.S. capital markets. The distribution shows meaningful cross-sectional variation, with the interquartile range spanning from 28.9% to 84.0% institutional ownership.

Firm size (lsize) demonstrates the typical right-skewed distribution observed in corporate finance studies, with a mean of 5.987 and median of 5.940, suggesting our sample includes firms across the size spectrum. The book-to-market ratio (lbtm) averages 0.663 with considerable dispersion (standard deviation of 0.648), indicating our sample encompasses both growth and value firms. Notably, the mean exceeds the median (0.531), reflecting the presence of high book-to-market firms that may face greater information asymmetry challenges.

Profitability measures reveal the impact of the sample period's economic conditions. Return on assets (lroa) shows a negative mean of -0.044, though the positive median of 0.021 suggests that while the average firm experienced losses, the typical firm remained profitable. This pattern likely reflects the inclusion of crisis years when many firms reported significant losses. Consistent with this interpretation, the loss indicator (lloss) shows that 33.5% of firm-years report losses, substantially higher than typical pre-crisis benchmarks of

approximately 20-25% reported in prior studies.

Stock return volatility (levol) averages 0.147 with high dispersion, reflecting the elevated market volatility during our sample period. The earnings volatility measure (lcalrisk) shows a mean of 0.317, indicating substantial earnings uncertainty across our sample firms. Management forecast frequency (freqMF) averages 0.601, suggesting that firms issue approximately 0.6 forecasts per year on average, though the high standard deviation of 0.895 indicates considerable heterogeneity in voluntary disclosure practices.

The treatment variables indicate that 58.2% of observations fall in the post-law period, providing balanced representation across the regulatory change period. Overall, our descriptive statistics suggest a comprehensive sample that captures significant variation in firm characteristics and information asymmetry proxies during a economically turbulent period.

RESULTS

Regression Analysis

We examine the association between Switzerland's Financial Market Supervision Act (FINMASA) implementation and voluntary disclosure among U.S. firms using three model specifications that progressively control for firm characteristics and unobserved heterogeneity. Our most comprehensive specification (3) includes firm fixed effects and control variables, revealing a treatment effect of -0.0248 ($t = -1.98$, $p = 0.0482$). This finding indicates that FINMASA implementation is associated with a statistically significant decrease in voluntary disclosure among affected U.S. firms, contrary to our theoretical predictions based on information asymmetry channels. The negative coefficient suggests that rather than increasing voluntary disclosure to mitigate information asymmetry, U.S. firms reduce their voluntary disclosure following the Swiss regulatory change. This result challenges the conventional wisdom that foreign regulatory uncertainty drives domestic firms to increase transparency

through enhanced voluntary disclosure.

The statistical significance and economic magnitude of our findings vary substantially across model specifications, highlighting the importance of controlling for firm-specific characteristics and unobserved heterogeneity. Specification (1), which excludes control variables and fixed effects, shows a large negative treatment effect of -0.0830 ($t = -8.40$, $p < 0.001$) but explains minimal variation in voluntary disclosure ($R^2 = 0.0021$). Specification (2) incorporates control variables and reduces the treatment effect magnitude to 0.0079, which becomes statistically insignificant ($t = 0.55$, $p = 0.5796$), while substantially improving model fit ($R^2 = 0.2465$). Our preferred specification (3) with firm fixed effects yields the most reliable estimate of -0.0248, achieving high explanatory power ($R^2 = 0.8751$) and suggesting that firm-specific unobserved characteristics significantly influence voluntary disclosure decisions. The progression across specifications demonstrates that omitted variable bias substantially affects treatment effect estimates, with the firm fixed effects specification providing the most credible causal inference by controlling for time-invariant firm characteristics that may correlate with both Swiss exposure and disclosure propensity.

The control variables in our analysis exhibit coefficients largely consistent with prior voluntary disclosure literature, lending credibility to our model specification. We find that institutional ownership (linstown) positively associates with voluntary disclosure in specification (2) but becomes insignificant when firm fixed effects are included, suggesting that the relationship may be driven by cross-sectional differences rather than within-firm variation. Firm size (lsize) consistently exhibits a positive and significant coefficient across specifications (0.1024 in specification 2, 0.0918 in specification 3), confirming established findings that larger firms engage in more voluntary disclosure due to greater analyst following and investor demand for information. Loss firms (lloss) demonstrate significantly lower voluntary disclosure across all specifications, consistent with managers' incentives to withhold

bad news. Stock return volatility (lsaret12) shows a negative association with voluntary disclosure, supporting theories that managers reduce disclosure during periods of poor performance to avoid further negative market reactions. These control variable patterns align with established voluntary disclosure determinants in the accounting literature, providing confidence in our model specification. Contrary to H1, our results do not support the hypothesis that FINMASA implementation increases voluntary disclosure through information asymmetry channels. Instead, we document a significant negative association, suggesting that alternative theoretical mechanisms may dominate the information asymmetry effect, such as regulatory substitution where enhanced foreign oversight reduces perceived benefits of voluntary disclosure, or strategic disclosure reduction to avoid drawing regulatory attention during periods of heightened global financial supervision.

CONCLUSION

This study examines whether Switzerland's Financial Market Supervision Act of 2009 influenced voluntary disclosure practices among U.S. firms through information asymmetry channels. We investigate how enhanced regulatory oversight and improved market integrity in Switzerland's financial markets created spillover effects that reduced information asymmetries for U.S. companies, potentially altering their voluntary disclosure incentives. Our research contributes to the growing literature on cross-border regulatory spillovers and their impact on corporate transparency (Christensen et al., 2013; Shroff et al., 2013).

Our empirical analysis reveals nuanced effects that depend critically on model specification and the inclusion of controls. In our baseline specification without controls, we find a statistically significant negative treatment effect of -0.083 (t-statistic = 8.40, $p < 0.001$), suggesting that the Swiss regulatory reform was associated with reduced voluntary disclosure among U.S. firms. However, this effect becomes statistically insignificant when we incorporate firm-level controls in our second specification, with the treatment effect becoming

positive but negligible (0.0079, p = 0.580). Most notably, our fully specified model with the highest explanatory power (R^2 = 0.875) shows a modest but statistically significant negative treatment effect of -0.025 (t-statistic = 1.98, p = 0.048). These findings suggest that Switzerland's enhanced financial market supervision reduced information asymmetries in global markets, thereby diminishing U.S. firms' incentives to engage in voluntary disclosure as a signaling mechanism. The economic magnitude, while statistically detectable, appears relatively modest, consistent with the indirect nature of cross-border regulatory spillovers operating through information asymmetry channels.

Our findings carry important implications for multiple stakeholders in financial markets. For regulators, our results demonstrate that domestic financial market reforms can have unintended consequences for corporate disclosure practices in foreign markets through information asymmetry channels. This suggests that regulatory coordination across jurisdictions may be necessary to achieve optimal disclosure outcomes globally. The evidence that enhanced Swiss market supervision indirectly affected U.S. firms' disclosure behavior underscores the interconnected nature of modern capital markets and the need for regulators to consider cross-border spillover effects when designing policy interventions (Leuz, 2010; Christensen et al., 2016). For corporate managers, our findings suggest that voluntary disclosure strategies should account for global regulatory developments that may alter the information environment and competitive dynamics. The reduction in voluntary disclosure following Switzerland's regulatory enhancement indicates that managers may rationally adjust their disclosure policies when information asymmetries decline through external channels, potentially reallocating resources from disclosure activities to other value-creating initiatives.

For investors and market participants, our results highlight the complex ways in which regulatory reforms in one jurisdiction can influence information production and availability in other markets. The finding that Swiss regulatory improvements were associated with reduced

voluntary disclosure by U.S. firms suggests that investors should consider how global regulatory developments may affect the information environment of their portfolio companies. This connects to broader literature on information asymmetry and voluntary disclosure, which suggests that firms reduce voluntary disclosure when alternative mechanisms for reducing information asymmetries become available (Diamond and Verrecchia, 1991; Healy and Palepu, 2001). Our evidence supports theoretical predictions that regulatory improvements in major financial centers can create positive externalities that reduce global information asymmetries, thereby altering firms' cost-benefit calculations regarding voluntary disclosure across borders.

Several limitations constrain the interpretation of our findings and suggest avenues for future research. First, our identification strategy relies on the assumption that Switzerland's Financial Market Supervision Act represents an exogenous shock to information asymmetries affecting U.S. firms. While this assumption appears reasonable given the domestic focus of the Swiss legislation, we cannot entirely rule out the possibility of confounding factors that simultaneously affected both Swiss regulatory development and U.S. firms' disclosure incentives. Second, our analysis focuses on aggregate voluntary disclosure measures and does not examine heterogeneity across different types of disclosure or firm characteristics that might moderate the asymmetry channel. Future research could explore whether the effects vary systematically across firms with different levels of international exposure, analyst coverage, or institutional ownership, as these factors likely influence how global regulatory changes affect firm-specific information asymmetries.

Future research should also investigate the mechanisms through which Swiss regulatory improvements transmitted to U.S. markets and affected information asymmetries. Potential channels include enhanced information production by financial intermediaries, improved market efficiency in processing information, or changes in investor behavior and

information acquisition strategies. Additionally, researchers could examine whether similar cross-border effects emerge from regulatory reforms in other major financial centers and whether the magnitude of spillover effects relates to the economic importance or interconnectedness of the reforming jurisdiction. Finally, future studies could explore the welfare implications of these cross-border disclosure effects, examining whether the reduction in voluntary disclosure represents an efficient response to improved information environments or potentially harmful reductions in corporate transparency that may disadvantage certain investor groups.

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Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	16,882	0.6006	0.8947	0.0000	0.0000	1.6094
Treatment Effect	16,882	0.5816	0.4933	0.0000	1.0000	1.0000
Institutional ownership	16,882	0.5693	0.3181	0.2894	0.6178	0.8399
Firm size	16,882	5.9867	2.0604	4.4840	5.9405	7.3840
Book-to-market	16,882	0.6628	0.6480	0.2937	0.5306	0.8603
ROA	16,882	-0.0443	0.2563	-0.0330	0.0211	0.0666
Stock return	16,882	-0.0180	0.4940	-0.3085	-0.1019	0.1465
Earnings volatility	16,882	0.1467	0.2842	0.0233	0.0568	0.1477
Loss	16,882	0.3348	0.4719	0.0000	0.0000	1.0000
Class action litigation risk	16,882	0.3171	0.2891	0.0889	0.2078	0.4755
Time Trend	16,882	1.9297	1.4063	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 Market Supervision Act Switzerland Information Asymmetry

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
Treatment Effect	1.00	**-0.05**	-0.01	**-0.07**	**0.20**	**-0.05**	0.00	**-0.02**	**0.10**	**0.27**
FreqMF	**-0.05**	1.00	**0.43**	**0.44**	**-0.15**	**0.23**	-0.01	**-0.15**	**-0.27**	-0.01
Institutional ownership	-0.01	**0.43**	1.00	**0.63**	**-0.15**	**0.28**	**-0.10**	**-0.22**	**-0.23**	**0.06**
Firm size	**-0.07**	**0.44**	**0.63**	1.00	**-0.35**	**0.36**	**0.03**	**-0.25**	**-0.40**	**0.12**
Book-to-market	**0.20**	**-0.15**	**-0.15**	**-0.35**	1.00	**0.04**	**-0.21**	**-0.13**	**0.14**	**-0.08**
ROA	**-0.05**	**0.23**	**0.28**	**0.36**	**0.04**	1.00	**0.12**	**-0.54**	**-0.59**	**-0.08**
Stock return	0.00	-0.01	**-0.10**	**0.03**	**-0.21**	**0.12**	1.00	0.01	**-0.14**	**0.04**
Earnings volatility	**-0.02**	**-0.15**	**-0.22**	**-0.25**	**-0.13**	**-0.54**	0.01	1.00	**0.33**	**0.13**
Loss	**0.10**	**-0.27**	**-0.23**	**-0.40**	**0.14**	**-0.59**	**-0.14**	**0.33**	1.00	**0.14**
Class action litigation risk	**0.27**	-0.01	**0.06**	**0.12**	**-0.08**	**-0.08**	**0.04**	**0.13**	**0.14**	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 Market Supervision Act Switzerland on Management Forecast Frequency

	(1)	(2)	(3)
Treatment Effect	-0.0830*** (8.40)	0.0079 (0.55)	-0.0248** (1.98)
Institutional ownership		0.7140*** (15.02)	0.0574 (1.10)
Firm size		0.1024*** (11.01)	0.0918*** (8.27)
Book-to-market		-0.0307** (2.31)	0.0039 (0.38)
ROA		0.0452 (1.40)	0.0405* (1.90)
Stock return		-0.0236** (2.19)	-0.0344*** (4.33)
Earnings volatility		0.0288 (0.90)	-0.0092 (0.24)
Loss		-0.1942*** (9.93)	-0.0730*** (6.33)
Class action litigation risk		-0.1331*** (4.70)	-0.0052 (0.33)
Time Trend		-0.0033 (0.62)	-0.0140*** (3.27)
Firm fixed effects	No	No	Yes
N	16,882	16,882	16,882
R^2	0.0021	0.2465	0.8751

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