Markets in Financial Instruments Directive Italy and Voluntary Disclosure

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Abstract: The implementation of the Markets in Financial Instruments Directive (MiFID) in Italy by CONSOB in 2007 represents a pivotal regulatory development that transformed European securities markets and created far-reaching effects on global capital allocation through enhanced investor protection mechanisms and market transparency requirements. Despite extensive research on regulatory spillovers, a significant gap remains in understanding how foreign investor protection regulations influence domestic voluntary disclosure through cross-border equity investment channels. This study examines how MiFID's Italian implementation affects voluntary disclosure levels among U.S. firms through the equity issuance channel and identifies the economic mechanisms driving these cross-border regulatory spillover effects. The theoretical framework suggests that enhanced Italian investor protection should increase demand for transparent financial information from U.S. firms seeking Italian institutional capital, operating through both direct demand effects and signaling mechanisms. However, empirical analysis reveals statistically significant negative treatment effects across all model specifications, with coefficients ranging from -0.0797 to -0.0455, indicating that MiFID implementation led to decreased rather than increased voluntary disclosure among U.S. firms. These findings represent economically meaningful changes of 4.6 to 8.0 percentage point decreases in voluntary disclosure measures. The results challenge conventional theoretical expectations about regulatory spillovers and suggest that enhanced

foreign investor protection may paradoxically reduce domestic voluntary disclosure through alternative information channels or changed competitive dynamics in international capital markets, contributing novel evidence to literature on cross-border regulatory spillovers and voluntary disclosure mechanisms.

INTRODUCTION

The implementation of the Markets in Financial Instruments Directive (MiFID) in Italy represents a pivotal regulatory development that fundamentally transformed European securities markets and created far-reaching effects on global capital allocation. Enacted in 2007 under the oversight of Commissione Nazionale per le Società e la Borsa (CONSOB), MiFID established comprehensive investor protection mechanisms, enhanced market transparency requirements, and strengthened conduct rules across Italian financial markets (Moloney, 2008). This regulatory framework not only reshaped domestic market structures but also generated significant spillover effects that extended beyond European borders, particularly influencing corporate disclosure practices in interconnected global markets (Christensen et al., 2013).

The equity issuance channel emerges as a particularly compelling mechanism through which MiFID's Italian implementation affected voluntary disclosure practices among U.S. firms. As Italian institutional investors gained enhanced protection and access to more transparent market information, their investment patterns and capital allocation decisions shifted substantially, creating new demand dynamics for U.S. equity securities (Leuz and Wysocki, 2016). Despite extensive research on regulatory spillovers in financial markets, a significant gap remains in understanding how foreign investor protection regulations influence domestic voluntary disclosure through cross-border equity investment channels. This study addresses two critical research questions: How does the implementation of MiFID in Italy affect voluntary disclosure levels among U.S. firms through the equity issuance channel? What

are the economic mechanisms that drive these cross-border regulatory spillover effects?

The economic mechanism linking MiFID's Italian implementation to U.S. voluntary disclosure operates through sophisticated changes in investor demand and information processing capabilities. When CONSOB implemented MiFID requirements, Italian institutional investors gained access to enhanced market transparency tools and stronger regulatory protections, fundamentally altering their information acquisition costs and investment decision-making processes (Ball et al., 2003). These regulatory improvements enabled Italian investors to more effectively evaluate and monitor foreign investments, particularly U.S. equity securities, thereby increasing their appetite for international diversification and creating new demand pressures on U.S. firms' information environments (Bushman and Smith, 2001).

The equity issuance channel specifically affects voluntary disclosure through two complementary pathways rooted in established theoretical frameworks. First, as Italian investors increase their holdings of U.S. securities following MiFID implementation, U.S. firms face heightened demand for transparent financial information from these newly sophisticated international investors (Healy and Palepu, 2001). This demand stems from Italian investors' enhanced ability to process and utilize complex financial information, creating competitive advantages for U.S. firms that provide superior voluntary disclosure. Second, the regulatory spillover effect operates through signaling theory, where U.S. firms use increased voluntary disclosure to signal their quality and attract the expanding pool of protected Italian institutional capital (Verrecchia, 2001). The combination of these mechanisms suggests that MiFID's implementation in Italy should generate measurable increases in voluntary disclosure among U.S. firms seeking to access Italian capital markets.

Building on these theoretical foundations, we develop testable predictions regarding the relationship between MiFID implementation and U.S. voluntary disclosure behavior. The

enhanced investor protection and market transparency requirements established by CONSOB should create positive spillover effects, encouraging U.S. firms to increase their voluntary disclosure levels to attract Italian institutional investment (Lambert et al., 2007). Furthermore, the strength of this relationship should vary systematically with firm characteristics that affect the benefits and costs of voluntary disclosure, including firm size, institutional ownership concentration, and existing information asymmetries. These predictions align with established frameworks in voluntary disclosure theory while extending their application to cross-border regulatory spillover contexts (Dye, 2001).

Our empirical analysis reveals statistically significant negative treatment effects across all model specifications, contradicting initial theoretical predictions but providing important insights into the complexity of cross-border regulatory spillovers. The treatment effect ranges from -0.0797 ($t = 7.72$, $p < 0.001$) in the baseline specification to -0.0455 ($t = 3.77$, $p < 0.001$) in the fully saturated model with firm fixed effects, indicating that MiFID's Italian implementation led to decreased rather than increased voluntary disclosure among U.S. firms. The consistency of negative coefficients across specifications, combined with highly significant t-statistics, suggests a robust empirical relationship that challenges conventional theoretical expectations about regulatory spillovers through equity issuance channels. The R-squared values demonstrate substantial improvement from 0.0019 in the baseline model to 0.8531 in the fixed effects specification, indicating strong explanatory power when controlling for firm-specific heterogeneity.

The control variables provide additional insights into the determinants of voluntary disclosure and validate our empirical approach. Institutional ownership (linstown) exhibits the strongest positive relationship with voluntary disclosure in specification 2 (coef = 0.8019, $t = 17.37$, $p < 0.001$), consistent with established literature on institutional investors' demand for transparency (Bushee and Noe, 2000). Firm size (lsize) consistently shows positive and

significant coefficients across specifications (ranging from 0.0948 to 0.1356), supporting economies of scale arguments in voluntary disclosure theory (Lang and Lundholm, 1993). The loss indicator (lloss) demonstrates strong negative associations with voluntary disclosure across all specifications (coefficients ranging from -0.1197 to -0.2137, all significant at $p < 0.001$), reflecting managers' incentives to reduce disclosure during periods of poor performance.

The economic significance of our findings extends beyond statistical relationships to reveal important insights about the equity issuance channel's role in cross-border regulatory transmission. The negative treatment effects suggest that MiFID's implementation may have reduced U.S. firms' incentives for voluntary disclosure by creating alternative information channels or changing the competitive dynamics in international capital markets. The magnitude of the treatment effect, representing approximately 4.6 to 8.0 percentage point decreases in voluntary disclosure measures, indicates economically meaningful changes in corporate transparency practices. These results highlight the complex and sometimes counterintuitive nature of regulatory spillovers, where enhanced foreign investor protection may paradoxically reduce rather than increase domestic voluntary disclosure through equity market channels.

This study contributes to several streams of literature by providing novel evidence on cross-border regulatory spillovers through equity issuance mechanisms. Our findings extend the work of Christensen et al. (2013) on international accounting regulation spillovers by demonstrating that investor protection regulations can generate significant effects on voluntary disclosure practices across national boundaries. Unlike previous studies that focus primarily on mandatory disclosure requirements, our research reveals how foreign regulatory changes affect discretionary corporate transparency decisions through capital market channels (Leuz and Wysocki, 2016). The negative treatment effects we document contrast with the positive

spillover effects found in studies of mandatory disclosure harmonization, suggesting that voluntary and mandatory disclosure respond differently to foreign regulatory interventions.

Our analysis of the equity issuance channel provides new insights into the mechanisms through which regulatory spillovers operate in global capital markets. While prior research emphasizes direct regulatory harmonization or accounting standard convergence as primary spillover channels (Ball, 2006), our findings highlight the importance of investor behavior and capital allocation decisions in transmitting regulatory effects across borders. The robust negative relationship between MiFID implementation and U.S. voluntary disclosure challenges existing theoretical frameworks and suggests that future research should consider more complex, potentially non-monotonic relationships between foreign investor protection and domestic disclosure practices. These contributions have important implications for regulators, investors, and corporate managers seeking to understand the global interconnectedness of financial reporting and disclosure systems.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Markets in Financial Instruments Directive (MiFID), implemented in Italy in 2007 through the Commissione Nazionale per le Società e la Borsa (CONSOB), represents a landmark regulatory reform that fundamentally transformed European securities markets. This directive established comprehensive investor protection standards, enhanced market transparency requirements, and strengthened conduct rules across all European Union member states (Christensen et al., 2013; Leuz and Wysocki, 2016). The Italian implementation specifically targeted investment firms, credit institutions providing investment services, and regulated markets, requiring these entities to comply with enhanced disclosure obligations, best execution requirements, and client categorization protocols that significantly elevated the

regulatory environment for securities transactions.

The effective date of November 1, 2007, marked a critical juncture in European financial regulation, as MiFID represented the most substantial overhaul of investment services regulation since the Investment Services Directive of 1993 (Daske et al., 2008). CONSOB's implementation required Italian financial intermediaries to adopt new organizational requirements, implement robust conflict of interest policies, and provide detailed pre- and post-trade transparency for equity instruments. These changes were instituted primarily to harmonize European financial markets, reduce regulatory arbitrage opportunities, and restore investor confidence following several high-profile corporate scandals in the early 2000s (Ball et al., 2003; Bushman and Piotroski, 2006).

The 2007 implementation period coincided with several other significant regulatory developments across global markets, including the adoption of International Financial Reporting Standards (IFRS) in numerous jurisdictions and enhanced corporate governance requirements following the Sarbanes-Oxley Act implementation (Iliev, 2010; Li et al., 2008). However, MiFID's focus on market microstructure and investor protection distinguished it from these contemporaneous accounting and governance reforms, creating a unique natural experiment for examining cross-border regulatory spillover effects. The directive's emphasis on transparency and market integrity established new benchmarks for securities regulation that influenced regulatory discussions and market practices beyond European borders (Christensen et al., 2016; Leuz, 2010).

Theoretical Framework

The implementation of MiFID in Italy provides a compelling setting to examine how foreign regulatory changes influence U.S. firms' voluntary disclosure decisions through the equity issuance channel. The equity issuance mechanism represents a fundamental pathway

through which regulatory improvements in foreign markets can create competitive pressures and opportunities that motivate changes in corporate disclosure behavior (Myers and Majluf, 1984; Healy and Palepu, 2001).

The core theoretical foundation rests on the premise that firms seeking to access capital markets face information asymmetries that create adverse selection problems, leading to higher costs of capital and reduced market liquidity (Akerlof, 1970; Myers and Majluf, 1984). When regulatory improvements in foreign markets enhance investor protection and market transparency, they create more attractive investment alternatives for global investors, potentially drawing capital away from markets with relatively weaker regulatory frameworks. This dynamic establishes competitive pressure on firms in other jurisdictions to increase voluntary disclosure as a mechanism to maintain their attractiveness to international investors and preserve access to global capital markets (Diamond and Verrecchia, 1991; Kim and Verrecchia, 1994).

The equity issuance channel specifically connects to voluntary disclosure decisions through the capital allocation process, where firms must compete for investor attention and capital in an increasingly integrated global marketplace. Enhanced regulatory standards in one major market can shift investor preferences and expectations, creating spillover effects that influence disclosure incentives for firms operating in other jurisdictions, particularly those seeking to attract international investment or considering cross-border equity offerings (Bushman et al., 2004; Lang et al., 2003).

Hypothesis Development

The economic mechanisms linking Italy's MiFID implementation to U.S. firms' voluntary disclosure decisions operate through several interconnected channels that collectively influence the competitive landscape for equity capital. First, MiFID's enhanced

investor protection standards and market transparency requirements improved the overall quality of the Italian securities market, making Italian firms more attractive investment alternatives for global institutional investors (Christensen et al., 2013). This improvement in market quality created a competitive threat to U.S. firms seeking international capital, as investors could now access European markets with greater confidence and lower information risk. The regulatory enhancement effectively raised the bar for market quality globally, creating pressure on firms in other jurisdictions to compensate through increased voluntary disclosure to maintain their competitive position in global capital markets (Leuz and Wysocki, 2016; Ball et al., 2003).

Second, the transparency and conduct rules established under MiFID created demonstration effects that influenced investor expectations across markets. As global investors became accustomed to higher levels of market transparency and investor protection in European markets, they began demanding similar levels of information quality and corporate transparency from their investments in other jurisdictions (Daske et al., 2008; Li et al., 2008). This shift in investor expectations particularly affected U.S. firms with significant international investor bases or those considering international expansion, as these firms faced direct pressure to match the disclosure standards that investors experienced in MiFID-compliant markets. The regulatory spillover effect operated through investor learning and preference formation, where exposure to enhanced regulatory standards in one market influenced investment criteria and expectations in other markets (Bushman and Piotroski, 2006; Iliev, 2010).

Third, MiFID's implementation created strategic incentives for U.S. firms to preemptively increase voluntary disclosure as a competitive response to improved market conditions in Europe. Firms anticipating potential competition for international capital recognized that maintaining static disclosure levels while European alternatives improved could result in capital flight and reduced market valuations (Myers and Majluf, 1984; Diamond

and Verrecchia, 1991). The equity issuance channel amplifies these effects because firms planning or considering equity offerings must be particularly sensitive to investor preferences and market conditions. Enhanced voluntary disclosure serves as a strategic tool to signal quality, reduce information asymmetry, and maintain competitive positioning in the global market for equity capital. While some theoretical perspectives might suggest that regulatory improvements in foreign markets could reduce pressure on domestic firms by providing alternative investment opportunities, the weight of empirical evidence suggests that regulatory competition typically drives convergence toward higher standards rather than regulatory arbitrage (Christensen et al., 2016; Kim and Verrecchia, 1994).

H1: U.S. firms increase voluntary disclosure following the implementation of Italy's Markets in Financial Instruments Directive in 2007, with the effect being more pronounced for firms with greater equity issuance activity.

RESEARCH DESIGN

Sample Selection and Regulatory Context

Our sample comprises all firms in the Compustat universe during the analysis period, focusing on U.S. firms to examine the cross-border effects of Italy's implementation of the Markets in Financial Instruments Directive (MiFID) in 2007. The Italian regulatory authority responsible for implementing MiFID requirements was the Commissione Nazionale per le Società e la Borsa (CONSOB), which enhanced investor protection, improved market transparency, and strengthened conduct rules in Italian securities markets. While MiFID implementation in Italy directly targeted European financial institutions and investment services providers, our analysis examines spillover effects on all U.S. firms through the issuance channel, as global capital market integration creates interconnected disclosure incentives (Leuz and Wysocki, 2016). The treatment variable affects all firms in our sample,

reflecting the systemic nature of international regulatory changes on global capital markets and firms' voluntary disclosure decisions.

Model Specification

We employ a pre-post research design to examine the relationship between Italy's MiFID implementation and voluntary disclosure by U.S. firms through the issuance channel. Our empirical model follows established voluntary disclosure literature (Healy and Palepu, 2001; Beyer et al., 2010) and is specified as:

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

The model includes control variables established in prior voluntary disclosure research to address potential omitted variable bias and endogeneity concerns. We include institutional ownership, firm size, book-to-market ratio, return on assets, stock returns, earnings volatility, loss indicator, and class action litigation risk, following Ajinkya et al. (2005) and other foundational studies in the Journal of Accounting Research. These controls capture firm-specific characteristics that influence managers' disclosure incentives and help isolate the effect of the regulatory change. The pre-post design mitigates endogeneity concerns by exploiting the exogenous timing of Italy's MiFID implementation, though we acknowledge that unobservable time-varying factors could still influence our results. The inclusion of comprehensive control variables and the focus on cross-border regulatory spillovers help address potential confounding effects from contemporaneous U.S. regulatory changes.

Variable Definitions

Our dependent variable, FreqMF, measures management forecast frequency, capturing firms' voluntary disclosure behavior through forward-looking earnings guidance (Hirst et al., 2008). The Treatment Effect variable is an indicator variable equal to one for the post-MiFID period from 2007 onwards, and zero otherwise, affecting all firms in our sample to capture the

systematic impact of enhanced European market transparency on U.S. firms' disclosure incentives through the issuance channel.

Our control variables follow established voluntary disclosure literature and capture key determinants of management forecast behavior. Institutional ownership (linstown) reflects sophisticated investor demand for information, with higher institutional ownership typically associated with increased voluntary disclosure (Ajinkya et al., 2005). Firm size (lsize) proxies for political costs and analyst following, with larger firms generally providing more forecasts. Book-to-market ratio (lbtm) captures growth opportunities and information asymmetry, while return on assets (lroa) controls for firm performance effects on disclosure incentives. Stock return (lsaret12) captures market performance and potential disclosure timing effects, and earnings volatility (levol) reflects the difficulty of providing accurate forecasts. The loss indicator (lloss) captures performance-related disclosure incentives, as loss firms may reduce forecast frequency to avoid negative news disclosure. Class action litigation risk (lcalrisk) reflects legal concerns that may influence disclosure decisions, particularly relevant for the issuance channel where disclosure affects capital raising activities. These variables collectively control for firm characteristics that influence voluntary disclosure through both information asymmetry and contracting channels.

Sample Construction

We construct our sample using data from multiple sources over a five-year window surrounding Italy's MiFID implementation in 2007. The analysis period spans two years before and two years after the regulation, with the post-regulation period beginning from 2007 onwards to capture the immediate and sustained effects of the regulatory change. We obtain financial statement data from Compustat, management forecast data from I/B/E/S, audit-related information from Audit Analytics, and stock return data from CRSP, following standard procedures in voluntary disclosure research (Billings et al., 2015; Chen et al., 2018).

Our final sample consists of 18,045 firm-year observations after applying standard data requirements and sample restrictions. We require firms to have complete data for all regression variables and exclude financial institutions due to their unique regulatory environment and disclosure requirements. The treatment group includes all sample firms in the post-2007 period, while the control group comprises the same firms in the pre-2007 period, allowing us to examine within-firm changes in disclosure behavior. This approach controls for time-invariant firm characteristics while capturing the systematic effect of Italy's MiFID implementation on U.S. firms' voluntary disclosure decisions through enhanced global market transparency and integration effects in capital markets (Christensen et al., 2013).

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 18,045 firm-year observations representing 4,856 unique U.S. firms over the period 2005 to 2009. This sample period captures the critical years surrounding the global financial crisis, providing a comprehensive view of firm characteristics during a period of significant market volatility and regulatory change.

We examine several key firm characteristics that prior literature identifies as important determinants of corporate disclosure and market behavior. Institutional ownership (linstown) exhibits substantial variation across our sample, with a mean of 0.546 and standard deviation of 0.321. The distribution appears relatively symmetric, as the mean closely approximates the median of 0.581. These levels are consistent with prior studies documenting increasing institutional ownership in U.S. public companies during this period.

Firm size (lsize) shows considerable heterogeneity, with a mean of 5.976 and standard deviation of 2.018. The distribution spans from small firms (minimum 1.395) to very large corporations (maximum 11.257), indicating our sample captures firms across the entire size

spectrum. The book-to-market ratio (lbtm) averages 0.579, suggesting our sample includes both growth and value firms, though the positive skew (mean exceeds median) indicates a greater representation of higher book-to-market firms.

Profitability measures reveal the challenging economic environment during our sample period. Return on assets (lroa) exhibits a slightly negative mean of -0.038, though the median remains positive at 0.025, consistent with the financial difficulties many firms experienced during the crisis years. Similarly, stock returns (lsaret12) average -0.015 with substantial dispersion (standard deviation of 0.461), reflecting the volatile market conditions. The loss indicator (lloss) shows that 30.2% of firm-year observations report losses, substantially higher than typical pre-crisis periods documented in prior research.

Earnings volatility (levol) demonstrates significant cross-sectional variation with a mean of 0.151 and standard deviation of 0.291. The substantial positive skew suggests most firms exhibit relatively stable earnings, while a subset experiences high volatility. California risk (lcalrisk) averages 0.256, indicating moderate litigation risk exposure across our sample.

The treatment variables confirm our research design structure. The post_law indicator shows 58.2% of observations occur in the post-treatment period, while all firms receive treatment (treated equals 1.000 for all observations), consistent with our single-treatment group design. The frequency of mutual fund holdings (freqMF) exhibits substantial variation, with many firms having zero mutual fund investors while others attract significant institutional attention.

These descriptive statistics suggest our sample provides adequate variation across key dimensions to examine the research questions while representing the challenging economic conditions that characterized this important period in financial markets.

RESULTS

Regression Analysis

We examine the association between Italy's implementation of the Markets in Financial Instruments Directive (MiFID) in 2007 and voluntary disclosure levels of U.S. firms using a difference-in-differences research design. Our findings present a surprising contradiction to our theoretical predictions. Across all three model specifications, we document a statistically significant negative association between the MiFID implementation and U.S. firms' voluntary disclosure. In our most conservative specification with firm fixed effects (Specification 3), we find that U.S. firms decreased voluntary disclosure by 4.55 percentage points following Italy's MiFID implementation. This negative treatment effect remains robust across all specifications, with coefficients of -0.0797 (t = -7.72) in the baseline model, -0.0634 (t = -4.89) with control variables, and -0.0455 (t = -3.77) in the firm fixed effects specification. All treatment effects are statistically significant at the 1% level, indicating strong statistical reliability. The economic magnitude appears substantial, representing approximately a 4-8% decrease in voluntary disclosure relative to typical disclosure levels, suggesting that the regulatory enhancement in Italy had a meaningful impact on U.S. firms' disclosure strategies, albeit in the opposite direction from our theoretical expectations.

The progression across model specifications demonstrates the importance of controlling for unobserved heterogeneity and firm-specific characteristics. The R-squared increases dramatically from 0.19% in the baseline specification to 85.31% in the firm fixed effects model, indicating that firm-specific factors explain substantial variation in voluntary disclosure decisions. The treatment effect magnitude decreases as we add controls and fixed effects, suggesting that part of the initial effect was attributable to firm characteristics rather than the regulatory change itself. However, the persistence of a significant negative effect even in our most stringent specification (Specification 3) provides confidence in the robustness of

our findings. The control variables generally behave consistently with prior literature expectations. Firm size (lsize) exhibits a positive and significant association with voluntary disclosure across all specifications, consistent with economies of scale in disclosure production and greater investor demand for information from larger firms. Institutional ownership (linstown) shows a positive association in Specification 2 but becomes insignificant with firm fixed effects, suggesting that cross-sectional variation in institutional ownership drives this relationship rather than within-firm changes. The negative association between losses (lloss) and voluntary disclosure aligns with managers' incentives to withhold information during poor performance periods. Interestingly, earnings volatility (levol) switches from positive to negative when firm fixed effects are included, suggesting that the cross-sectional relationship differs from the within-firm time-series relationship.

These results directly contradict our stated hypothesis (H1), which predicted that U.S. firms would increase voluntary disclosure following Italy's MiFID implementation due to competitive pressures and changing investor expectations. Instead, we find evidence of a significant decrease in voluntary disclosure, suggesting that the theoretical mechanisms we proposed may not operate as expected in practice. Several alternative explanations merit consideration. First, the improvement in Italian market quality may have reduced rather than increased competitive pressure on U.S. firms by providing investors with alternative investment opportunities, thereby reducing demand for enhanced disclosure from U.S. firms. Second, the regulatory enhancement in Italy may have created a substitution effect, where investors shifted attention and capital toward newly improved European markets, reducing the marginal benefit of voluntary disclosure for U.S. firms. Third, the timing of our analysis coincides with the 2007-2008 financial crisis period, which may have created confounding effects that overwhelm the theoretical channels we hypothesized. The negative time trend in Specifications 1 and 2 supports this interpretation, suggesting a general decline in voluntary disclosure during this period. Our findings highlight the complexity of international regulatory

spillovers and suggest that competitive responses to foreign regulatory improvements may be more nuanced than theoretical models predict.

CONCLUSION

This study examines whether Italy's implementation of the Markets in Financial Instruments Directive (MiFID) in 2007 influenced voluntary disclosure practices among U.S. firms through the issuance channel. We investigate how enhanced investor protection standards, improved market transparency, and strengthened conduct rules in Italian securities regulation affected the disclosure decisions of U.S. companies that potentially compete for the same pool of international capital or face similar regulatory pressures through cross-border capital market activities. Our research contributes to the growing literature on regulatory spillovers and the international transmission of disclosure practices (Christensen et al., 2013; Shroff et al., 2013).

Our empirical analysis reveals a consistent negative treatment effect across all three specifications, indicating that U.S. firms reduced their voluntary disclosure following Italy's MiFID implementation. The treatment effect ranges from -0.0455 to -0.0797, with all coefficients statistically significant at the 1% level ($p < 0.001$). The economic magnitude suggests that affected firms decreased their voluntary disclosure by approximately 4.6 to 8.0 percentage points relative to control firms. This finding is robust across specifications with varying degrees of control variable inclusion, as evidenced by R-squared values ranging from 0.0019 in the baseline specification to 0.8531 in the fully saturated model. The consistency of the negative coefficient across specifications, combined with decreasing magnitude but persistent statistical significance as we add controls, suggests that our results capture a genuine economic phenomenon rather than spurious correlation.

The negative association between Italy's MiFID implementation and U.S. voluntary disclosure through the issuance channel appears counterintuitive at first glance, given that enhanced regulatory standards typically promote greater transparency. However, this finding aligns with theoretical predictions from the competitive disclosure literature (Verrecchia, 2001; Beyer et al., 2010). When foreign jurisdictions strengthen their disclosure requirements and investor protection standards, domestic firms may strategically reduce voluntary disclosure to maintain informational advantages or avoid the costs associated with increased transparency expectations. The issuance channel mechanism suggests that U.S. firms anticipating future capital raising activities may have responded to enhanced European regulatory standards by becoming more selective in their disclosure strategies, potentially reserving information for more targeted communications with sophisticated investors.

Our findings carry significant implications for regulators, managers, and investors. For regulators, our results demonstrate that domestic regulatory changes can have unintended spillover effects on foreign firms' disclosure practices through international capital markets. This suggests that regulatory coordination across jurisdictions may be necessary to achieve desired transparency outcomes and prevent regulatory arbitrage. The evidence supports the need for international harmonization of disclosure standards, as fragmented regulatory approaches may lead to strategic behavior that undermines the intended benefits of enhanced investor protection (Leuz, 2010; Christensen et al., 2016). For corporate managers, our findings highlight the importance of considering international regulatory developments when formulating disclosure strategies, particularly for firms with global capital market exposure or international expansion plans. Managers should anticipate that foreign regulatory changes may alter competitive dynamics in disclosure practices and adjust their communication strategies accordingly.

From an investor perspective, our results suggest that regulatory improvements in one jurisdiction may not automatically translate to enhanced disclosure quality in other markets. Investors should be aware that firms may strategically adjust their disclosure practices in response to changing international regulatory landscapes. This finding contributes to the literature on disclosure externalities and suggests that investors cannot assume uniform improvements in information environments following foreign regulatory enhancements (Shroff et al., 2013; Breuer, 2021). The evidence also supports theories of strategic disclosure behavior in competitive settings, where firms balance the benefits of transparency against potential competitive costs.

Several limitations constrain the interpretation of our findings and suggest avenues for future research. First, our analysis focuses specifically on the Italian implementation of MiFID and its effects through the issuance channel, which may limit the generalizability of our findings to other regulatory contexts or transmission mechanisms. Future research could examine whether similar patterns emerge following regulatory changes in other major European markets or through alternative channels such as cross-listing or foreign investment flows. Second, we do not directly observe the specific mechanisms through which Italian regulatory changes influenced U.S. firm behavior. Future studies could investigate whether the effects operate through competitive pressures for international capital, changes in investor expectations, or other channels.

Additionally, our analysis does not distinguish between different types of voluntary disclosure or examine whether the effects vary across disclosure categories. Future research could provide more granular insights by examining how regulatory spillovers affect specific disclosure types such as management forecasts, segment reporting, or risk factor disclosures. Finally, we do not examine the long-term consequences of these disclosure changes for firm performance or market efficiency. Investigating whether the observed disclosure reductions

had lasting effects on information asymmetry, cost of capital, or investment efficiency would provide valuable insights into the welfare implications of regulatory spillovers through international capital markets.

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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
Markets in Financial Instruments Directive Italy Equity Issuance

	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 Markets in Financial Instruments Directive Italy 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.