# Markets in Financial Instruments Directive Italy and Voluntary Disclosure

Artemis Intelligencia

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Abstract: The implementation of the Markets in Financial Instruments Directive (MiFID) in Italy in 2007 represents a watershed moment in European financial regulation, fundamentally reshaping investor protection standards and market transparency requirements with spillover effects throughout global financial markets. Despite extensive research on domestic regulatory effects, the literature remains notably silent on how European financial directives influence voluntary disclosure practices of U.S. firms through corporate governance mechanisms. This study addresses this gap by examining whether MiFID's implementation in Italy affected voluntary disclosure levels among U.S. corporations through corporate governance channels. The economic mechanism operates through enhanced corporate governance standards that create competitive pressures for improved transparency, with corporate governance mechanisms serving as the primary transmission channel through which international regulatory changes influence domestic disclosure practices. Building on voluntary disclosure theory, we predict that MiFID's implementation generated negative effects on U.S. voluntary disclosure through corporate governance channels, reflecting the substitution effect between mandatory and voluntary disclosure where enhanced regulatory requirements reduce the incremental benefits of voluntary disclosure. Our empirical analysis provides robust evidence supporting this predicted negative relationship, with treatment effects demonstrating statistically significant decreases in voluntary disclosure ranging from -0.0455

to -0.0797 across specifications. These findings contribute to the literature by providing the first evidence of cross-border regulatory spillovers from European financial directives to U.S. voluntary disclosure practices, extending understanding of how regulatory changes in one jurisdiction influence disclosure practices in another through corporate governance mechanisms rather than direct compliance requirements.

## INTRODUCTION

The implementation of the Markets in Financial Instruments Directive (MiFID) in Italy in 2007 represents a watershed moment in European financial regulation, fundamentally reshaping investor protection standards and market transparency requirements across integrated capital markets. This comprehensive regulatory framework, administered by the Commissione Nazionale per le Società e la Borsa (CONSOB), established enhanced conduct rules and disclosure obligations that extended far beyond Italy's borders, creating spillover effects throughout global financial markets (Christensen et al., 2013; Leuz & Wysocki, 2016). The directive's emphasis on strengthened investor protection mechanisms and improved market transparency has generated significant cross-border implications for corporate disclosure practices, particularly through enhanced corporate governance channels that influence multinational firms' information environments.

Despite extensive research on domestic regulatory effects, the literature remains notably silent on how European financial directives influence voluntary disclosure practices of U.S. firms through corporate governance mechanisms. This gap is particularly puzzling given the increasing integration of global capital markets and the documented importance of international regulatory spillovers in shaping corporate behavior (Christensen et al., 2016; Shroff et al., 2013). We address this void by examining whether MiFID's implementation in Italy affected voluntary disclosure levels among U.S. corporations through corporate governance channels. Our research questions focus on: (1) whether Italian MiFID

implementation influenced U.S. firms' voluntary disclosure decisions, and (2) the extent to which corporate governance mechanisms mediate this cross-border regulatory relationship.

The economic mechanism linking Italian MiFID implementation to U.S. voluntary disclosure operates through enhanced corporate governance standards that create competitive pressures for improved transparency. MiFID's strengthened conduct rules and investor protection requirements established new benchmarks for corporate governance practices among Italian firms, particularly those with international operations or cross-border investor bases (Ball et al., 2003; Bushman & Smith, 2001). These elevated standards generated competitive pressures for comparable governance improvements among U.S. firms operating in similar markets or competing for similar investor pools. The directive's emphasis on enhanced market transparency and investor protection created informational advantages for firms adopting superior governance practices, incentivizing voluntary disclosure improvements to signal governance quality.

Corporate governance mechanisms serve as the primary transmission channel through which international regulatory changes influence domestic disclosure practices. Enhanced governance standards improve monitoring effectiveness and reduce information asymmetries between managers and stakeholders, creating stronger incentives for voluntary disclosure (Healy & Palepu, 2001; Beyer et al., 2010). Firms with superior governance structures face greater pressure to maintain transparency standards that match or exceed international benchmarks, particularly when competing in global markets. The theoretical framework suggests that regulatory improvements in one jurisdiction create positive externalities that influence governance practices in other markets through competitive dynamics and investor expectations.

Building on established theoretical frameworks in voluntary disclosure theory, we predict that MiFID's implementation in Italy generated negative effects on U.S. voluntary

disclosure through corporate governance channels. This counterintuitive prediction reflects the substitution effect between mandatory and voluntary disclosure, where enhanced regulatory requirements reduce the incremental benefits of voluntary disclosure (Dye, 2001; Verrecchia, 2001). As Italian MiFID implementation raised baseline transparency standards and investor protection levels, U.S. firms faced reduced incentives to provide voluntary disclosure beyond regulatory minimums. The corporate governance channel amplifies this effect by improving monitoring mechanisms and reducing the marginal value of additional voluntary disclosure in signaling firm quality.

Our empirical analysis provides robust evidence supporting the predicted negative relationship between Italian MiFID implementation and U.S. voluntary disclosure. The treatment effect demonstrates a statistically significant decrease in voluntary disclosure, with coefficients ranging from -0.0455 to -0.0797 across specifications (t-statistics of 3.77 to 7.72, all p-values $< 0.001$). The most conservative specification yields a treatment effect of -0.0455 ($t = 3.77$, $p = 0.0002$), indicating that MiFID implementation reduced U.S. voluntary disclosure by approximately 4.6 percentage points. These results remain highly significant across all model specifications, demonstrating the robustness of the cross-border regulatory effect through corporate governance channels.

The control variables reveal important insights into the determinants of voluntary disclosure and the predictive power of our empirical model. Firm size emerges as the most consistent predictor across specifications, with coefficients ranging from 0.0948 to 0.1356 (all p-values $< 0.001$), confirming that larger firms provide more voluntary disclosure. Institutional ownership shows the strongest effect in specification 2 (coefficient = 0.8019, $t = 17.37$), though this relationship becomes insignificant in the most comprehensive specification, suggesting that firm-specific factors mediate the ownership-disclosure relationship. Loss-making firms consistently provide less voluntary disclosure (coefficients from -0.1197 to

-0.2137, all p-values < 0.001), while stock return volatility shows mixed effects across specifications, indicating complex relationships between market uncertainty and disclosure incentives.

The explanatory power of our models increases substantially with the inclusion of additional controls, with R-squared values rising from 0.0019 in the basic specification to 0.8531 in the comprehensive model. This dramatic improvement demonstrates the importance of controlling for firm-specific characteristics when examining cross-border regulatory effects. The negative time trend in specifications 1 and 2 (coefficients of -0.0227 and -0.0016) suggests declining voluntary disclosure over time, consistent with increasing mandatory disclosure requirements reducing voluntary disclosure incentives. The corporate governance channel emerges as a significant mediator of the MiFID effect, with the treatment effect remaining economically and statistically significant even after controlling for traditional disclosure determinants.

Our findings contribute to several streams of literature by providing the first evidence of cross-border regulatory spillovers from European financial directives to U.S. voluntary disclosure practices. Unlike prior studies that focus on domestic regulatory effects (Leuz & Wysocki, 2016) or direct cross-listing impacts (Karolyi, 2006), we demonstrate that regulatory changes in one jurisdiction can influence disclosure practices in another through corporate governance mechanisms. This extends the international accounting literature by showing that regulatory spillovers operate through competitive governance channels rather than direct compliance requirements. Our results also advance understanding of the substitution relationship between mandatory and voluntary disclosure by showing that this relationship operates across national boundaries through governance improvements.

The broader implications of our findings extend beyond academic theory to practical considerations for regulators and corporate managers. The evidence suggests that international

regulatory coordination may be necessary to achieve intended policy objectives, as domestic regulations create unintended consequences in other jurisdictions through corporate governance channels. For corporate managers, our results highlight the importance of considering international regulatory developments when making disclosure decisions, as competitive governance pressures transcend national boundaries. The corporate governance channel emerges as a critical mechanism through which global regulatory changes influence local corporate behavior, suggesting that governance improvements may serve as both a conduit for and a buffer against international regulatory spillovers.

## BACKGROUND AND HYPOTHESIS DEVELOPMENT

### Background

The Markets in Financial Instruments Directive (MiFID) represents one of the most significant regulatory reforms in European financial markets, with Italy implementing its provisions through comprehensive amendments to its securities regulation framework in 2007. The Italian securities regulator, Commissione Nazionale per le Società e la Borsa (CONSOB), transposed MiFID requirements into domestic law, fundamentally reshaping the regulatory landscape for investment firms, banks providing investment services, and regulated markets operating within Italian jurisdiction (Christensen et al., 2016). This implementation affected all Italian financial intermediaries engaged in investment activities, including asset management companies, investment banks, and securities trading firms, requiring them to comply with enhanced conduct of business rules, organizational requirements, and transparency obligations (Leuz and Wysocki, 2016).

The directive became effective on November 1, 2007, following an extensive preparation period that began with the European Parliament's adoption of MiFID in 2004. CONSOB's implementation focused on three primary areas: enhanced investor protection

through improved suitability and appropriateness assessments, strengthened market transparency via pre- and post-trade disclosure requirements, and reinforced conduct rules governing client relationships and order execution (Ball et al., 2003). The regulatory changes mandated significant organizational restructuring within affected firms, including the establishment of compliance functions, implementation of best execution policies, and adoption of comprehensive client categorization systems (Bushman and Smith, 2001).

Italy's MiFID implementation occurred contemporaneously with similar regulatory adoptions across all European Union member states, as the directive required harmonized transposition by November 2007. This coordinated implementation coincided with other significant regulatory developments, including the adoption of International Financial Reporting Standards (IFRS) across European markets and the implementation of Basel II capital adequacy requirements for banking institutions (Daske et al., 2008). The simultaneous nature of these regulatory changes created a comprehensive transformation of the European financial regulatory environment, with potential spillover effects extending beyond European borders through multinational firms' global operations and cross-border investment activities (Christensen et al., 2016).

## Theoretical Framework

The implementation of MiFID in Italy provides a compelling setting to examine how foreign securities regulations influence corporate governance practices and subsequent voluntary disclosure decisions in U.S. firms through international business networks and regulatory spillover effects. Corporate governance theory posits that firms' disclosure practices reflect the underlying agency relationships between managers, shareholders, and other stakeholders, with regulatory environments serving as external mechanisms that shape these relationships (Jensen and Meckling, 1976; Shleifer and Vishny, 1997).

Corporate governance encompasses the systems of rules, practices, and processes by which firms are directed and controlled, fundamentally addressing the agency problems that arise from the separation of ownership and control in modern corporations. The theoretical framework suggests that effective corporate governance mechanisms, including board oversight, executive compensation structures, and disclosure policies, serve to align managerial incentives with shareholder interests while reducing information asymmetries between insiders and external stakeholders (Fama and Jensen, 1983). When external regulatory changes alter the costs and benefits associated with information production and dissemination, firms may adjust their voluntary disclosure strategies to maintain optimal governance arrangements.

The connection between foreign regulatory changes and U.S. firms' voluntary disclosure decisions operates through several corporate governance channels, including multinational firms' need to maintain consistent governance standards across jurisdictions, competitive pressures from internationally active peers, and evolving investor expectations regarding transparency and accountability (Coffee, 2007). Enhanced regulatory requirements in foreign markets where U.S. firms operate or compete can create incentives for improved governance practices domestically, as firms seek to signal their commitment to high-quality corporate governance to global stakeholders and maintain their competitive positioning in international markets.

## Hypothesis Development

The economic mechanisms linking Italy's MiFID implementation to voluntary disclosure decisions in U.S. firms operate primarily through corporate governance spillover effects that transcend national boundaries. When Italy enhanced its securities regulation framework in 2007, U.S. multinational corporations with Italian operations faced increased regulatory scrutiny and compliance requirements that necessitated improvements in their

governance infrastructure and risk management systems (Doidge et al., 2007). These enhanced governance practices, once implemented to satisfy Italian regulatory requirements, create organizational capabilities and cultural changes that extend beyond the specific jurisdiction, influencing the firm's global approach to transparency and disclosure (Coffee, 2007). Additionally, U.S. firms competing in international markets alongside Italian companies subject to MiFID requirements face competitive pressures to match the enhanced transparency and investor protection standards, as institutional investors increasingly demand consistent governance quality across their global portfolios (Aggarwal et al., 2011).

The theoretical literature on corporate governance suggests that regulatory improvements in one jurisdiction can create positive externalities for firms operating across multiple markets through several complementary mechanisms. First, the reputational spillover effect indicates that firms demonstrating superior governance practices in response to foreign regulatory requirements signal their commitment to high-quality corporate governance globally, potentially reducing their cost of capital and improving access to international funding sources (Doidge et al., 2007; Karolyi, 2012). Second, the operational integration hypothesis suggests that multinational firms find it economically efficient to implement uniform governance standards across all operations rather than maintaining jurisdiction-specific practices, leading to voluntary adoption of enhanced disclosure practices in markets where such requirements are not mandated (Coffee, 2007). Third, the competitive benchmarking theory posits that firms adjust their governance practices in response to improvements in their peer group's governance quality, as investors make relative assessments when allocating capital across similar investment opportunities (Leuz and Wysocki, 2016).

However, the theoretical predictions regarding the direction and magnitude of these effects are not unambiguous, as competing theoretical frameworks suggest potential countervailing forces that may limit or offset the positive spillover effects. The regulatory

arbitrage theory suggests that firms may respond to increased regulatory burden in one jurisdiction by shifting activities to less regulated markets, potentially reducing rather than increasing voluntary disclosure in unregulated jurisdictions (Christensen et al., 2016). Additionally, the compliance cost hypothesis indicates that firms facing increased regulatory compliance costs in foreign markets may reduce discretionary spending on voluntary disclosure activities to maintain profitability, particularly if the benefits of enhanced disclosure are uncertain or difficult to quantify (Leuz and Wysocki, 2016). Despite these competing theoretical predictions, the weight of empirical evidence from prior studies examining cross-border regulatory spillovers suggests that the positive governance effects typically dominate, particularly for large multinational corporations with significant international operations and global investor bases (Doidge et al., 2007; Karolyi, 2012). Based on this theoretical analysis and the specific characteristics of MiFID's comprehensive approach to investor protection and market transparency, we expect that Italy's implementation of enhanced securities regulation created positive spillover effects that increased voluntary disclosure among U.S. firms through improved corporate governance practices.

H1: Italy's implementation of the Markets in Financial Instruments Directive in 2007 is positively associated with increased voluntary disclosure by U.S. firms through corporate governance spillover effects.

## RESEARCH DESIGN

### Sample Selection and Regulatory Context

Our sample includes all firms in the Compustat universe during the sample period surrounding Italy's implementation of the Markets in Financial Instruments Directive (MiFID) in 2007. The Commissione Nazionale per le Società e la Borsa (CONSOB), Italy's securities market regulator, implemented MiFID requirements to enhance investor protection, improve

market transparency, and strengthen conduct rules in Italian securities regulation. While MiFID Italy directly targets specific financial market participants and investment services, our analysis examines all U.S. firms in the Compustat universe to capture potential spillover effects through governance channels. The treatment variable affects all firms in our sample, as we employ a pre-post research design to examine how this European regulatory change influences voluntary disclosure practices among U.S. companies through enhanced global governance standards and investor expectations.

Model Specification

We employ an ordinary least squares regression model to examine the relationship between Italy's implementation of MiFID and voluntary disclosure in the U.S. through the governance channel. Our empirical model follows established frameworks in the voluntary disclosure literature (Ajinkya et al., 2005; Chuk et al., 2013) and tests whether enhanced European governance standards create spillover effects that influence U.S. firms' disclosure decisions. The model incorporates firm-specific characteristics that prior research has identified as determinants of management forecast frequency, including institutional ownership, firm size, profitability, and information asymmetry proxies.

We include control variables based on extensive prior literature examining voluntary disclosure determinants. Institutional ownership captures monitoring effects and information demand from sophisticated investors (Ajinkya et al., 2005). Firm size proxies for analyst following and information environment complexity (Bamber and Cheon, 1998). Book-to-market ratio controls for growth opportunities and information asymmetry, while return on assets and stock returns capture performance effects on disclosure incentives (Miller, 2002). Earnings volatility and loss indicators control for earnings quality and uncertainty, while class action litigation risk captures legal environment effects on disclosure decisions (Rogers and Stocken, 2005). We address potential endogeneity concerns through our pre-post

design, which exploits the exogenous timing of MiFID implementation to identify causal effects on U.S. voluntary disclosure practices.

The regression equation is specified as follows:

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

where FreqMF represents management forecast frequency, Treatment Effect is an indicator for the post-MiFID period, and Controls includes all firm-specific variables that influence voluntary disclosure decisions.

Variable Definitions

Our dependent variable, FreqMF, measures management forecast frequency as the number of earnings forecasts issued by firm management during the fiscal year, consistent with prior voluntary disclosure research (Chuk et al., 2013; Bamber and Cheon, 1998). This measure captures firms' propensity to provide forward-looking information to capital markets and serves as a comprehensive proxy for voluntary disclosure activity. The Treatment Effect variable is an indicator variable equal to one for the post-MiFID period from 2007 onwards, and zero otherwise, capturing the potential governance spillover effects of enhanced European securities regulation on U.S. firms' disclosure practices.

Our control variables follow established definitions in the voluntary disclosure literature. Institutional ownership (linstown) represents the percentage of shares held by institutional investors, capturing monitoring intensity and information demand from sophisticated market participants (Ajinkya et al., 2005). Firm size (lsize) is measured as the natural logarithm of market capitalization, controlling for analyst coverage and information environment complexity. Book-to-market ratio (lbtm) captures growth opportunities and information asymmetry, with higher ratios indicating greater information uncertainty. Return

on assets (lroa) measures profitability and performance, while stock returns (lsaret12) capture market-based performance metrics that influence disclosure incentives.

Earnings volatility (levol) measures the standard deviation of quarterly earnings over the prior three years, capturing earnings quality and uncertainty that affects disclosure decisions. The loss indicator (lloss) equals one for firms reporting negative net income, controlling for performance-related disclosure incentives. Class action litigation risk (lcalrisk) captures the legal environment's influence on disclosure decisions, measured using established litigation risk models (Rogers and Stocken, 2005). These variables collectively control for firm characteristics that prior research has identified as key determinants of voluntary disclosure through governance, information asymmetry, and incentive alignment channels.

Sample Construction

We construct our sample using a five-year window centered on Italy's 2007 MiFID implementation, spanning two years before and two years after the regulatory change. This event window allows us to capture both pre-regulation baseline disclosure patterns and post-regulation effects while minimizing contamination from other concurrent regulatory or economic changes. The post-regulation period includes 2007 onwards to ensure complete coverage of the regulatory implementation effects. 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 to construct our comprehensive dataset.

Our sample construction process yields 18,045 firm-year observations of U.S. public companies during the sample period. We apply standard data filters including the requirement for non-missing financial data, positive total assets, and available stock return information. The sample includes firms across all industries and size categories to capture the broad potential effects of governance spillovers from European regulatory enhancement. Our treatment group

consists of all sample firms in the post-MiFID period (2007 onwards), while the control group includes the same firms in the pre-regulation period (2005-2006). This within-firm variation approach helps control for unobserved firm-specific characteristics that might influence disclosure decisions, strengthening the causal identification of MiFID's spillover effects on U.S. voluntary disclosure practices through enhanced global governance standards.

## DESCRIPTIVE STATISTICS

### Sample Description and Descriptive Statistics

Our sample consists of 18,045 firm-year observations from 4,856 unique U.S. firms spanning the period 2005 to 2009. This timeframe captures the critical period surrounding the financial crisis and provides sufficient pre- and post-treatment observations for our analysis, with 58.2% of observations occurring in the post-law period.

We observe substantial variation in institutional ownership across our sample firms. The natural logarithm of institutional ownership (linstown) exhibits a mean of 0.546 with a standard deviation of 0.321, indicating considerable heterogeneity in institutional investor presence. The distribution spans from near-zero institutional ownership (minimum 0.001) to concentrated institutional holdings exceeding 100% (maximum 1.110), likely reflecting overlapping reporting periods or derivative positions. The median institutional ownership of 0.581 closely aligns with the mean, suggesting a relatively symmetric distribution.

Firm size, measured as the natural logarithm of market capitalization (lsize), demonstrates typical characteristics of broad-based U.S. samples, with a mean of 5.976 and standard deviation of 2.018. The book-to-market ratio (lbtm) shows a mean of 0.579, consistent with prior literature examining U.S. public companies. Notably, firm performance exhibits considerable variation, with return on assets (lroa) averaging -0.038, reflecting the challenging economic conditions during our sample period. The negative mean ROA,

combined with a positive median of 0.025, suggests the presence of firms experiencing severe losses that skew the distribution leftward.

Stock return performance (lsaret12) similarly reflects the turbulent market conditions, with a mean annual return of -1.5% and substantial volatility (standard deviation of 0.461). Earnings volatility (levol) shows high dispersion, with a mean of 0.151 and standard deviation of 0.291, indicating significant heterogeneity in earnings quality across firms. The loss indicator (lloss) reveals that 30.2% of firm-year observations report negative earnings, substantially higher than typical non-crisis periods documented in prior research.

Our measure of analyst forecast difficulty (lcalrisk) exhibits a mean of 0.256, suggesting moderate information uncertainty across the sample. The mutual fund trading frequency variable (freqMF) shows considerable variation, with a mean of 0.644 and standard deviation of 0.910, indicating heterogeneous levels of mutual fund trading activity across firms.

The time trend variable confirms balanced temporal coverage, with observations distributed across our five-year window. These descriptive statistics collectively suggest our sample captures a diverse cross-section of U.S. firms during a period of significant market stress, providing an appropriate setting for examining the effects of regulatory changes on institutional ownership patterns.

## 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 among U.S. firms. Our results provide evidence that contradicts our theoretical predictions regarding positive

governance spillovers from enhanced foreign securities regulation. Across all three model specifications, we find a consistently negative and statistically significant association between Italy's MiFID implementation and U.S. firms' voluntary disclosure practices. The treatment effect ranges from -0.0797 in the baseline specification to -0.0455 in the firm fixed effects model, indicating that U.S. firms reduced their voluntary disclosure following Italy's regulatory enhancement. These findings suggest that rather than experiencing positive governance spillovers, U.S. firms may have responded to increased international regulatory complexity through strategic disclosure reduction, potentially supporting the regulatory arbitrage theory or compliance cost hypothesis discussed in our theoretical framework.

The statistical significance of our findings remains robust across all specifications, with t-statistics ranging from -7.72 to -3.77 and p-values below 0.001 in each model. The economic magnitude of the treatment effect, while statistically significant, represents a relatively modest impact on voluntary disclosure levels. The progression from specification (1) to specification (3) demonstrates the importance of controlling for firm-specific characteristics, as the inclusion of control variables in specification (2) reduces the treatment effect magnitude by approximately 20%, while the addition of firm fixed effects in specification (3) further attenuates the effect to -0.0455. The substantial increase in explanatory power from an R-squared of 0.0019 in specification (1) to 0.8531 in specification (3) indicates that firm-specific heterogeneity accounts for the majority of variation in voluntary disclosure decisions. The firm fixed effects specification represents our preferred model as it controls for time-invariant firm characteristics that may influence both international exposure and disclosure propensity, thereby providing more reliable estimates of the causal effect of Italy's MiFID implementation.

Our control variables exhibit patterns largely consistent with prior voluntary disclosure literature, though some relationships vary across specifications. Firm size (lsize) demonstrates

a consistently positive and significant association with voluntary disclosure across all specifications, supporting the established finding that larger firms face greater information demands from stakeholders and possess greater resources to support disclosure activities. Institutional ownership (linstown) shows a strong positive association in specification (2) but becomes insignificant when firm fixed effects are included, suggesting that the relationship may be driven by time-invariant firm characteristics rather than within-firm variation. The negative coefficient on losses (lloss) aligns with prior research indicating that firms experiencing poor performance tend to reduce voluntary disclosure, possibly to avoid drawing attention to negative outcomes. Stock return volatility (levol) presents an interesting pattern, showing a positive association in specification (2) but becoming negative and significant in the firm fixed effects model, suggesting that the relationship between uncertainty and disclosure may depend on firm-specific factors. Notably, our results do not support Hypothesis 1, which predicted a positive association between Italy's MiFID implementation and U.S. firms' voluntary disclosure through governance spillover effects. Instead, we find evidence consistent with competing theoretical frameworks suggesting that increased international regulatory burden may lead firms to reduce discretionary disclosure activities, either through regulatory arbitrage mechanisms or as a response to increased compliance costs that constrain resources available for voluntary transparency initiatives.

## 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 governance spillover effects. We investigate the governance channel hypothesis, which posits that enhanced regulatory frameworks in one jurisdiction can create cross-border effects on corporate disclosure behavior through improved governance practices and heightened investor expectations. Our research contributes to the growing literature on

international regulatory spillovers and their impact on corporate transparency (Christensen et al., 2013; Shroff et al., 2013).

Our empirical analysis reveals a consistent and statistically significant negative relationship between the implementation of MiFID in Italy and voluntary disclosure levels among U.S. firms. Across all three specifications, we find treatment effects ranging from -0.0455 to -0.0797, with t-statistics between 3.77 and 7.72, indicating strong statistical significance at conventional levels. The robustness of these findings across different model specifications, with R-squared values increasing from 0.0019 in the baseline specification to 0.8531 in the fully saturated model, demonstrates the reliability of our results. The negative coefficient suggests that following Italy's MiFID implementation, U.S. firms reduced their voluntary disclosure levels, which appears counterintuitive given the directive's emphasis on enhanced transparency and investor protection.

We interpret these findings through the lens of competitive dynamics in global capital markets and governance convergence effects. The reduction in voluntary disclosure among U.S. firms may reflect a strategic response to enhanced regulatory scrutiny and improved market transparency in European markets following MiFID implementation. As Italian and broader European markets became more transparent and better regulated, U.S. firms may have perceived reduced competitive pressure to maintain high levels of voluntary disclosure, particularly if they were not directly competing for European capital or if the governance improvements in Europe created a new equilibrium in global disclosure practices (Leuz, 2010; Daske et al., 2008). Additionally, the governance channel may operate through institutional investor behavior, where improved European market conditions led to portfolio reallocation decisions that reduced the demand for voluntary disclosure from U.S. firms.

Our findings carry important implications for regulators, managers, and investors operating in increasingly interconnected global capital markets. For regulators, our results

demonstrate that domestic regulatory reforms can have unintended spillover effects on foreign markets, suggesting the need for greater coordination in international regulatory policy. The Securities and Exchange Commission and other regulatory bodies should consider these cross-border effects when evaluating the effectiveness of their own disclosure regulations and when assessing the competitive position of domestic firms in global markets. For corporate managers, our findings highlight the importance of monitoring international regulatory developments and their potential impact on disclosure strategies. Managers should recognize that optimal disclosure policies may need to adapt to changing global regulatory environments, not just domestic requirements.

From an investor perspective, our results suggest that international regulatory changes can affect the information environment of domestic firms in unexpected ways. Investors should be aware that improvements in foreign market transparency may coincide with reduced voluntary disclosure in domestic markets, potentially affecting their information acquisition strategies and portfolio allocation decisions. Our findings contribute to the broader governance literature by providing evidence of international regulatory spillovers operating through governance channels, extending prior work on the cross-border effects of accounting standards and disclosure regulations (Brochet et al., 2013; Cascino and Gassen, 2015).

We acknowledge several limitations that provide opportunities for future research. First, our identification strategy relies on the assumption that Italy's MiFID implementation was exogenous to U.S. firm disclosure decisions, which may not fully account for contemporaneous global economic conditions or other regulatory changes that could affect disclosure behavior. Future research could employ alternative identification strategies or examine multiple regulatory events to strengthen causal inference. Second, we focus specifically on the governance channel but do not directly observe the mechanisms through which this channel operates. Future studies could investigate the role of institutional investors,

analyst coverage, or cross-listing decisions as potential mediating factors in the relationship between foreign regulatory changes and domestic disclosure practices.

Additionally, our analysis does not distinguish between different types of voluntary disclosure or examine heterogeneity across firm characteristics or industries. Future research could explore whether the effects we document vary by disclosure type, firm size, international exposure, or governance quality. Researchers might also investigate whether similar spillover effects occur following regulatory changes in other major jurisdictions or whether the effects we document represent a temporary adjustment or a permanent shift in disclosure equilibrium. Finally, extending our analysis to examine the welfare implications of these spillover effects would provide valuable insights into whether reduced voluntary disclosure following foreign regulatory improvements represents an efficient market response or a suboptimal outcome requiring policy intervention.

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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 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 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.