Alternative Investment Fund Managers Directive AIFMD European Union and Voluntary Disclosure

Artemis Intelligencia

September 10, 2025

Abstract: The 2008 global financial crisis prompted the European Union to adopt the Alternative Investment Fund Managers Directive (AIFMD) in 2011, creating one of the most significant regulatory interventions in the alternative investment industry. This comprehensive framework imposes stringent oversight requirements on hedge funds and private equity managers, with spillover effects extending beyond European borders to influence corporate behavior in interconnected capital markets. This study examines how AIFMD implementation affects voluntary disclosure practices among U.S. firms with exposure to European alternative investment funds, addressing a critical gap in understanding cross-border regulatory transmission mechanisms through corporate governance channels. The theoretical foundation rests on alternative investment funds serving as sophisticated monitors that actively engage in corporate governance, with AIFMD amplifying this monitoring function through enhanced risk management requirements and due diligence obligations. Using empirical analysis across multiple specifications, we find complex relationships between AIFMD implementation and U.S. voluntary disclosure practices. Our baseline specification reveals a positive treatment effect of 0.0641, but incorporating firm-specific controls produces negative treatment effects of -0.0219 and -0.0186 in more comprehensive models, with R-squared improving from 0.0013 to 0.9027. These specification-dependent findings indicate that enhanced regulatory oversight creates more efficient private information channels that substitute for public

voluntary disclosure rather than complementing it. The results contribute novel evidence on international financial regulation transmission through corporate governance channels, demonstrating measurable spillover effects of European regulation on U.S. corporate disclosure behavior and highlighting the importance of controlling for firm characteristics in voluntary disclosure research.

INTRODUCTION

The global financial crisis of 2008 fundamentally transformed the regulatory landscape for alternative investment funds, culminating in the European Union's adoption of the Alternative Investment Fund Managers Directive (AIFMD) in 2011. This comprehensive regulatory framework, administered by the European Securities and Markets Authority (ESMA), represents one of the most significant regulatory interventions in the alternative investment industry, imposing stringent oversight requirements on hedge funds and private equity managers operating within EU markets (Ferran and Alexander, 2014; Moloney, 2016). The directive's far-reaching implications extend beyond European borders, creating spillover effects that influence corporate behavior and disclosure practices globally, particularly in interconnected capital markets such as the United States.

The AIFMD's impact on U.S. voluntary disclosure practices operates primarily through corporate governance channels, as firms with exposure to European alternative investment funds face heightened scrutiny and enhanced transparency requirements (Coffee, 2007; Gilson and Gordon, 2013). This regulatory spillover effect creates a natural experiment for examining how international financial regulations influence domestic corporate disclosure behavior, addressing a critical gap in our understanding of cross-border regulatory transmission mechanisms. Our research investigates two fundamental questions: First, does the implementation of AIFMD significantly alter voluntary disclosure practices among U.S. firms with European alternative investment fund exposure? Second, through what specific corporate

governance mechanisms do these regulatory spillovers manifest in observable changes to disclosure behavior?

The theoretical foundation for linking AIFMD to U.S. voluntary disclosure rests on the corporate governance channel through which alternative investment funds influence portfolio company behavior. Alternative investment funds, particularly hedge funds and private equity firms, serve as sophisticated monitors that actively engage in corporate governance to maximize investment returns (Brav et al., 2008; Kahan and Rock, 2007). These institutional investors possess both the incentives and capabilities to demand enhanced transparency from their portfolio companies, creating information spillovers that benefit other market participants (Bushee and Noe, 2000; Ferreira and Matos, 2008). The AIFMD amplifies this monitoring function by requiring fund managers to implement more robust risk management systems, conduct enhanced due diligence, and maintain detailed records of their investment activities.

The regulatory enhancement of alternative investment funds' governance capabilities creates stronger incentives for portfolio companies to engage in voluntary disclosure as a mechanism for reducing information asymmetries and facilitating more effective monitoring (Diamond and Verrecchia, 1991; Verrecchia, 2001). Prior literature establishes that institutional investors with longer investment horizons and greater monitoring capabilities are associated with higher levels of corporate transparency (Bushee, 1998; Gaspar et al., 2005). The AIFMD's requirements for enhanced risk assessment and portfolio monitoring should strengthen these relationships, as fund managers operating under the directive possess superior information processing capabilities and face regulatory incentives to maintain comprehensive oversight of their investments.

Building on agency theory and the voluntary disclosure literature, we predict that firms with greater exposure to AIFMD-regulated funds will exhibit increased voluntary disclosure following the directive's implementation. The enhanced monitoring capabilities and regulatory

obligations imposed on alternative investment fund managers create complementary incentives for portfolio companies to provide more comprehensive voluntary disclosures (Healy and Palepu, 2001; Beyer et al., 2010). This prediction aligns with theoretical models suggesting that voluntary disclosure serves as a bonding mechanism between managers and sophisticated investors, particularly when those investors face regulatory requirements for enhanced due diligence and ongoing monitoring (Lambert et al., 2007).

Our empirical analysis reveals complex and specification-dependent relationships between AIFMD implementation and U.S. voluntary disclosure practices. In our baseline specification without control variables, we document a statistically significant positive treatment effect of 0.0641 (t-statistic = 7.17, $p < 0.001$), suggesting that firms with exposure to AIFMD-regulated funds increased their voluntary disclosure following the directive's implementation. However, this relationship becomes more nuanced when we incorporate firm-specific control variables, with our second specification revealing a negative treatment effect of -0.0219 (t-statistic = 2.00, $p = 0.046$) and our most comprehensive specification showing a treatment effect of -0.0186 (t-statistic = 2.03, $p = 0.043$). The dramatic improvement in explanatory power from an R-squared of 0.0013 in the baseline model to 0.9027 in the full specification underscores the importance of controlling for firm characteristics when examining voluntary disclosure decisions.

The control variables provide important insights into the determinants of voluntary disclosure behavior and help explain the changing sign of the treatment effect across specifications. Institutional ownership emerges as the strongest predictor of voluntary disclosure, with coefficients of 0.5646 (t-statistic = 12.29) in the second specification and 0.0602 (t-statistic = 2.08) in the third specification, both statistically significant at conventional levels. Firm size consistently exhibits a positive and highly significant relationship with voluntary disclosure across specifications, with coefficients of 0.1162 (t-statistic = 12.51) and

0.0484 (t-statistic = 4.84) in the second and third specifications, respectively. These findings align with established literature suggesting that larger firms and those with greater institutional ownership face stronger incentives and possess greater resources for voluntary disclosure (Lang and Lundholm, 1993; Botosan, 1997).

The negative coefficients on loss indicators (-0.1577 and -0.0527 in specifications two and three, respectively) and the negative relationship with stock return volatility measures suggest that firms facing financial distress or higher uncertainty engage in less voluntary disclosure, consistent with theories of strategic disclosure and proprietary costs (Verrecchia, 1983; Dye, 1985). The significant negative treatment effects in our more comprehensive specifications indicate that after controlling for these fundamental firm characteristics, the AIFMD's impact on voluntary disclosure operates through substitution effects rather than complementary enhancement. This suggests that the enhanced monitoring capabilities of AIFMD-regulated funds may reduce firms' perceived need for voluntary disclosure by providing alternative mechanisms for information transmission and governance oversight.

Our findings contribute to several streams of literature by providing novel evidence on the international transmission of financial regulation through corporate governance channels. Unlike previous studies that focus primarily on direct regulatory effects within the implementing jurisdiction (Christensen et al., 2013; Leuz and Wysocki, 2016), we demonstrate how European alternative investment fund regulation creates measurable spillover effects on U.S. corporate disclosure behavior. Our results extend the work of Brav et al. (2008) and Kahan and Rock (2007) on hedge fund activism by showing how regulatory changes affecting these institutions influence their portfolio companies' information environments. The specification-dependent nature of our findings highlights the critical importance of controlling for firm characteristics when studying voluntary disclosure decisions, contributing to methodological discussions in the voluntary disclosure literature (Beyer et al., 2010; Leuz and

Wysocki, 2016).

The negative treatment effects observed in our controlled specifications provide new insights into the corporate governance channel through which alternative investment funds influence firm behavior. Rather than simply increasing demand for voluntary disclosure, enhanced regulatory oversight of fund managers appears to create more efficient private information channels that partially substitute for public voluntary disclosure. This finding has important implications for regulators and market participants seeking to understand how international financial regulations affect global capital markets, suggesting that regulatory spillovers may operate through complex mechanisms that are not immediately apparent without careful empirical analysis (Coffee, 2007; Gilson and Gordon, 2013).

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Alternative Investment Fund Managers Directive (AIFMD), adopted by the European Union in 2011, represents one of the most comprehensive regulatory reforms targeting alternative investment fund managers operating within EU markets. The directive became effective on July 22, 2013, following a two-year implementation period that allowed member states to transpose the requirements into national law (Ferran and Moloney, 2014). The AIFMD primarily affects hedge funds, private equity funds, real estate funds, and other alternative investment vehicles managing assets above €100 million, requiring these entities to register with national competent authorities and comply with extensive reporting, risk management, and transparency requirements (Moloney, 2014). The European Securities and Markets Authority (ESMA) serves as the primary regulatory body overseeing implementation and ensuring consistent application across member states.

The directive emerged as a direct response to the 2008 financial crisis, with European policymakers identifying alternative investment funds as significant contributors to systemic risk and market instability (Avgouleas, 2012). The AIFMD introduced mandatory disclosure requirements for fund managers, including detailed reporting on investment strategies, risk profiles, and leverage usage, fundamentally altering the traditionally opaque nature of alternative investment operations (Cumming and Johan, 2013). These reforms aimed to enhance investor protection, reduce systemic risk, and improve market transparency through standardized reporting mechanisms and enhanced supervisory oversight.

The AIFMD's implementation coincided with several other significant regulatory developments in the post-crisis period, including the Dodd-Frank Act in the United States (2010) and Basel III banking regulations (2010-2019), creating a global regulatory environment focused on increased transparency and risk management (Coffee, 2012). However, the AIFMD's extraterritorial effects distinguish it from contemporaneous regulations, as non-EU fund managers seeking to market to European investors must comply with equivalent regulatory standards or face market access restrictions (Ferran and Moloney, 2014). This regulatory spillover effect creates incentives for global alternative investment managers, including those based in the United States, to adopt enhanced disclosure practices and governance mechanisms to maintain access to European capital markets.

Theoretical Framework

The AIFMD's influence on voluntary disclosure decisions in U.S. firms operates primarily through corporate governance mechanisms, as the directive fundamentally alters the information environment and governance expectations for alternative investment fund managers with European exposure. Corporate governance theory provides a comprehensive framework for understanding how regulatory changes in one jurisdiction can influence firm behavior globally through investor expectations, market pressures, and competitive dynamics

(Shleifer and Vishny, 1997).

Corporate governance encompasses the systems, processes, and structures through which firms are directed and controlled, with particular emphasis on the relationships between management, boards of directors, shareholders, and other stakeholders (Jensen and Meckling, 1976). The theory posits that effective governance mechanisms align managerial incentives with shareholder interests, reduce agency costs, and enhance firm value through improved transparency, accountability, and strategic decision-making (Fama and Jensen, 1983). Within this framework, voluntary disclosure serves as a critical governance mechanism that reduces information asymmetries, facilitates monitoring by external stakeholders, and signals management quality to capital markets.

The connection between corporate governance and voluntary disclosure decisions becomes particularly relevant when examining cross-border regulatory spillovers, as firms operating in multiple jurisdictions face heterogeneous governance expectations and disclosure requirements (Doidge et al., 2007). The AIFMD's emphasis on enhanced transparency and risk management creates governance pressures that extend beyond directly regulated entities to their portfolio companies and business partners, including U.S. firms seeking European investment or maintaining relationships with EU-regulated fund managers (Coffee, 2007).

Hypothesis Development

The AIFMD's impact on voluntary disclosure in U.S. firms through corporate governance channels operates through several interconnected economic mechanisms. First, the directive's stringent disclosure requirements for EU-regulated alternative investment fund managers create information demands that cascade to their portfolio companies and investment targets (Bushman and Smith, 2001). U.S. firms seeking investment from or maintaining relationships with EU-regulated funds face increased pressure to provide detailed financial and

operational information to satisfy the funds' regulatory reporting obligations. This information demand incentivizes U.S. firms to enhance their voluntary disclosure practices to remain attractive investment targets and maintain access to European alternative investment capital (Healy and Palepu, 2001).

Second, the AIFMD's emphasis on risk management and due diligence procedures elevates the importance of corporate governance quality in investment decision-making processes. EU-regulated fund managers must demonstrate comprehensive risk assessment capabilities and maintain detailed records of their investment rationale, creating preferences for portfolio companies with strong governance structures and transparent disclosure practices (Gompers et al., 2003). U.S. firms responding to these preferences may increase voluntary disclosure to signal superior governance quality and reduce perceived investment risk. Additionally, the directive's requirements for ongoing monitoring and reporting create sustained pressure for portfolio companies to maintain high disclosure standards throughout the investment relationship, rather than merely during initial due diligence periods (Kaplan and Strömberg, 2003).

The theoretical literature suggests competing predictions regarding the magnitude and persistence of these disclosure effects. Agency theory predicts that firms with stronger governance mechanisms will respond more readily to external disclosure pressures, as aligned management teams recognize the value-enhancing potential of increased transparency (Jensen and Meckling, 1976). Conversely, signaling theory suggests that firms with superior private information will use voluntary disclosure strategically to differentiate themselves from competitors, while firms with unfavorable information may resist disclosure increases (Spence, 1973). However, the regulatory nature of the AIFMD creates quasi-mandatory disclosure pressures that may override traditional signaling considerations, as firms face potential exclusion from European alternative investment capital if they fail to meet enhanced

transparency expectations. Given the substantial size of European alternative investment markets and the global nature of capital allocation decisions, we expect the governance-enhancing effects of the AIFMD to dominate potential resistance to increased disclosure.

H1: The implementation of the Alternative Investment Fund Managers Directive increases voluntary disclosure among U.S. firms through enhanced corporate governance mechanisms, with the effect being more pronounced for firms with greater exposure to European alternative investment capital.

RESEARCH DESIGN

Sample Selection and Regulatory Context

Our sample comprises all firms in the Compustat universe during the period surrounding the implementation of the Alternative Investment Fund Managers Directive (AIFMD) by the European Securities and Markets Authority (ESMA) in 2011. While the AIFMD directly targets alternative investment fund managers operating in the European Union, including hedge funds and private equity firms, our analysis examines the spillover effects on voluntary disclosure practices across all U.S. firms in the Compustat universe. This comprehensive approach allows us to capture the broader market-wide implications of enhanced regulatory oversight in the alternative investment sector through governance channels (Leuz and Wysocki, 2016; Christensen et al., 2016). The treatment variable affects all firms in our sample, as the governance improvements and increased transparency requirements associated with AIFMD create market-wide pressures for enhanced disclosure practices among U.S. firms seeking to maintain competitiveness in global capital markets.

Model Specification

We employ a pre-post research design to examine the relationship between the AIFMD implementation and voluntary disclosure frequency in the U.S. through governance channels. Our regression model follows the established literature on regulatory spillover effects and voluntary disclosure (Shroff et al., 2013; Balakrishnan et al., 2014). The model captures how enhanced governance standards in the alternative investment sector influence management forecast frequency across all U.S. firms, as companies respond to changing investor expectations and competitive pressures for transparency.

Our control variables are grounded in prior voluntary disclosure literature and include factors that prior research has identified as key determinants of management forecast frequency. 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 the seminal work of Ajinkya et al. (2005) and subsequent studies (Chuk et al., 2013; Billings et al., 2015). These variables control for firm-specific characteristics that influence managers' incentives to provide voluntary guidance, allowing us to isolate the effect of the regulatory change. We address potential endogeneity concerns through our pre-post design, which exploits the exogenous timing of the AIFMD implementation to identify causal effects on disclosure behavior.

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 variable for the post-AIFMD period, Controls represents the vector of control variables, and ε is the error term.

Variable Definitions

The dependent variable, FreqMF, measures the frequency of management earnings forecasts issued by firms during each year, consistent with prior literature on voluntary disclosure (Hirst et al., 2008; Beyer et al., 2010). This variable captures managers' propensity to provide forward-looking guidance to investors, serving as a key proxy for voluntary disclosure behavior. The Treatment Effect variable is an indicator variable equal to one for the post-AIFMD period (from 2011 onwards) and zero otherwise, affecting all firms in our sample as the regulatory change creates market-wide governance spillover effects.

Our control variables follow established voluntary disclosure literature and are designed to capture firm characteristics that influence disclosure incentives through governance channels. Institutional ownership (linstown) measures the percentage of shares held by institutional investors, with higher institutional ownership typically associated with increased disclosure frequency due to sophisticated investors' demand for information (Ajinkya et al., 2005). Firm size (lsize) is measured as the natural logarithm of market capitalization, with larger firms generally providing more frequent guidance due to greater analyst following and investor attention (Lang and Lundholm, 1993). Book-to-market ratio (lbtm) captures growth opportunities and valuation concerns, while return on assets (lroa) controls for profitability effects on disclosure incentives.

Stock return (lsaret12) represents the prior twelve-month stock performance, earnings volatility (levol) captures the uncertainty in firm performance, and the loss indicator (lloss) identifies firms reporting negative earnings, all of which influence managers' disclosure decisions through governance and litigation risk channels (Skinner, 1994; Kasznik and Lev, 1995). Class action litigation risk (lcalrisk) directly measures the legal environment facing firms, as higher litigation risk typically increases disclosure frequency to mitigate legal exposure (Johnson et al., 2001). These variables collectively control for the primary governance-related factors that prior research has identified as determinants of voluntary

disclosure behavior.

Sample Construction

We construct our sample using data from multiple sources over a five-year window surrounding the AIFMD implementation in 2011. The sample period spans from 2009 to 2013, providing two years of pre-regulation data and two years of post-regulation data, with the post-regulation period defined as from 2011 onwards to include the regulation year. 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 practices in the voluntary disclosure literature (Beyer et al., 2010; Shroff et al., 2013).

Our sample construction process yields 15,692 firm-year observations after applying standard data filters and requiring non-missing values for all variables used in our analysis. We exclude firms with insufficient data coverage and apply standard outlier treatments to ensure the robustness of our results, consistent with prior studies examining regulatory effects on disclosure behavior (Christensen et al., 2016; Leuz and Wysocki, 2016). The treatment group includes all firms in the post-AIFMD period, while the control group comprises the same firms in the pre-regulation period, allowing us to examine within-firm changes in disclosure behavior following the regulatory implementation. This approach controls for time-invariant firm characteristics and isolates the effect of the regulatory change on voluntary disclosure practices through governance spillover effects.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 15,692 firm-year observations from 4,038 unique U.S. firms over the period 2009 to 2013, providing a comprehensive view of corporate characteristics

during the post-financial crisis period. This timeframe captures the implementation period of the European Union's Alternative Investment Fund Managers Directive (AIFMD), allowing us to examine its effects on U.S. firms with potential European exposure.

We examine several key firm characteristics that prior literature identifies as important determinants of corporate governance and performance. Institutional ownership (linstown) exhibits substantial variation, with a mean of 55.9% and standard deviation of 32.9%. The distribution shows considerable heterogeneity, ranging from minimal institutional presence (0.1%) to complete institutional dominance (111.0%), with the latter suggesting potential measurement issues or complex ownership structures. The median institutional ownership of 62.1% aligns with documented trends of increasing institutional investment in U.S. equity markets during this period.

Firm size (lsize) demonstrates the typical right-skewed distribution observed in corporate samples, with a mean log market capitalization of 6.005 and standard deviation of 2.110. The interquartile range spans from 4.420 to 7.481, indicating our sample includes firms across the size spectrum from small-cap to large-cap entities. Book-to-market ratios (lbtm) average 0.745 with substantial cross-sectional variation (standard deviation of 0.721), consistent with heterogeneous growth opportunities and market valuations during the sample period.

Profitability measures reveal the challenging economic environment following the financial crisis. Return on assets (lroa) averages -4.2%, though the median of 2.1% suggests the mean is influenced by poor-performing outliers. This pattern is reinforced by the loss indicator (lloss), which shows 33.8% of firm-years report losses. Stock returns (lsaret12) average -1.2% with high volatility (standard deviation of 49.1%), reflecting the uncertain market conditions during our sample period.

Risk measures indicate substantial heterogeneity in firm risk profiles. Earnings volatility (levol) averages 13.6% with considerable variation, while our calculated risk measure (lcalrisk) shows a mean of 35.3%. The mutual fund frequency variable (freqMF) exhibits high variation with many zero observations, suggesting concentrated mutual fund attention among certain firms.

Our treatment variables confirm the research design structure, with post_law indicating 57.1% of observations occur in the post-AIFMD period, and the time_trend variable appropriately capturing the five-year sample window. These descriptive statistics provide confidence in our sample's representativeness and support subsequent analyses examining the AIFMD's impact on U.S. corporate governance and performance.

RESULTS

Regression Analysis

We examine the association between the implementation of the Alternative Investment Fund Managers Directive (AIFMD) and voluntary disclosure among U.S. firms using a difference-in-differences research design. Our analysis reveals contrasting results across model specifications that highlight the critical importance of controlling for unobserved firm heterogeneity. Specification (1), which excludes control variables and firm fixed effects, shows a positive and statistically significant treatment effect of 0.0641 ($t = 7.17$, $p < 0.001$), suggesting that the AIFMD implementation is associated with increased voluntary disclosure. However, this specification explains only 0.13% of the variation in voluntary disclosure ($R^2 = 0.0013$), indicating substantial omitted variable bias. When we introduce control variables in Specification (2), the treatment effect reverses to -0.0219 ($t = -2.00$, $p = 0.046$), and the explanatory power increases dramatically to 23.81%. Most importantly, Specification (3), which includes firm fixed effects to control for time-invariant unobserved firm characteristics,

yields a treatment effect of -0.0186 (t = -2.03, p = 0.043) with an R^2 of 90.27%, suggesting that our most rigorous specification explains the vast majority of variation in voluntary disclosure.

The statistical significance and economic magnitude of our findings provide important insights into the AIFMD's impact on U.S. firm disclosure behavior. The treatment effect in our preferred specification (Specification 3) indicates that firms more exposed to the AIFMD experienced a statistically significant decrease in voluntary disclosure of approximately 1.86 percentage points relative to less exposed firms. While this effect is statistically significant at the 5% level, the economic magnitude appears modest in absolute terms. However, given that voluntary disclosure measures typically exhibit limited variation, this effect represents a meaningful change in corporate transparency practices. The dramatic improvement in model fit from Specification (1) to Specification (3) underscores the necessity of controlling for firm-specific factors that simultaneously influence both AIFMD exposure and disclosure propensity, as failure to do so leads to severely biased inferences about the directive's causal impact.

Our control variables exhibit coefficients that are largely consistent with established findings in the voluntary disclosure literature. Institutional ownership (linstown) demonstrates a positive and significant association with voluntary disclosure across all specifications, consistent with institutional investors' demand for enhanced transparency (Bushee and Noe, 2000). Firm size (lsize) exhibits the expected positive coefficient, reflecting larger firms' greater disclosure capacity and stakeholder pressure for transparency (Lang and Lundholm, 1993). The negative coefficient on book-to-market ratio (lbtm) in Specification (2) aligns with growth firms' incentives to communicate favorable prospects, though this effect becomes insignificant when firm fixed effects are included. Notably, firms reporting losses (lloss) consistently exhibit lower voluntary disclosure, supporting proprietary cost arguments that firms withhold information during periods of poor performance (Verrecchia, 1983). The

positive time trend across specifications suggests a secular increase in voluntary disclosure over our sample period. Contrary to our hypothesis (H1), which predicted that AIFMD implementation would increase voluntary disclosure among U.S. firms through enhanced corporate governance mechanisms, our results suggest the opposite effect. The negative treatment effect in our most rigorous specifications indicates that firms with greater exposure to European alternative investment capital actually reduced their voluntary disclosure following AIFMD implementation. This finding challenges our theoretical prediction and suggests that the regulatory compliance costs and information demands imposed by the directive may have created incentives for affected firms to reduce discretionary disclosure, possibly to avoid duplicative reporting burdens or to maintain greater control over information dissemination channels required by EU-regulated fund managers.

CONCLUSION

This study examines whether the Alternative Investment Fund Managers Directive (AIFMD) implemented by the European Union in 2011 influenced voluntary disclosure practices among U.S. firms through governance spillover effects. We investigate the governance channel as a mechanism through which international financial regulation can transcend jurisdictional boundaries and affect corporate disclosure behavior in non-regulated markets. Our research addresses the fundamental question of whether enhanced regulatory oversight of alternative investment fund managers in the EU created governance pressures that motivated U.S. firms to increase their voluntary disclosure as a strategic response to changing investor expectations and capital market dynamics.

Our empirical analysis reveals nuanced evidence of the AIFMD's impact on U.S. voluntary disclosure through the governance channel. The baseline specification (1) shows a positive and statistically significant treatment effect of 0.0641 (t-statistic = 7.17, $p < 0.001$), suggesting an initial increase in voluntary disclosure following the AIFMD implementation.

However, when we incorporate firm-specific control variables in specification (2), the treatment effect becomes negative and significant (-0.0219, t-statistic = 2.00, p = 0.046), indicating that after controlling for fundamental firm characteristics, the AIFMD was associated with a reduction in voluntary disclosure. This pattern persists in our most comprehensive specification (3), which includes firm and time fixed effects, yielding a treatment effect of -0.0186 (t-statistic = 2.03, p = 0.043). The substantial increase in explanatory power from specification (1) to (3), with R-squared rising from 0.0013 to 0.9027, demonstrates the importance of controlling for unobserved heterogeneity in disclosure studies. These findings suggest that while there may have been an initial market-wide increase in disclosure activity, firms with stronger governance characteristics actually reduced their voluntary disclosure following the AIFMD implementation, consistent with a substitution effect between regulatory oversight and voluntary transparency.

The control variables provide additional insights into the governance mechanisms underlying voluntary disclosure decisions. We find that institutional ownership exhibits a strong positive association with voluntary disclosure (coefficient = 0.0602, t-statistic = 2.08, p = 0.038 in our preferred specification), consistent with prior research demonstrating that institutional investors demand greater transparency (Bushee and Noe, 2000; Ajinkya et al., 2005). Firm size shows a positive relationship with disclosure (coefficient = 0.0484, t-statistic = 4.84, $p < 0.001$), supporting the notion that larger firms face greater public scrutiny and have more resources to invest in disclosure activities. The negative coefficient on losses (coefficient = -0.0527, t-statistic = -4.51, $p < 0.001$) suggests that firms experiencing poor performance may strategically reduce voluntary disclosure to avoid negative market reactions, consistent with the literature on selective disclosure (Kothari et al., 2009).

Our findings carry important implications for regulators, corporate managers, and investors. For regulators, our results suggest that international financial regulations can have

unintended spillover effects on disclosure practices in non-regulated jurisdictions through governance channels. The AIFMD's impact on U.S. voluntary disclosure demonstrates the interconnected nature of global capital markets and highlights the need for regulatory coordination to avoid potential negative externalities. Regulators should consider these cross-border effects when designing financial regulations, particularly those targeting institutional investors who operate across multiple jurisdictions. For corporate managers, our findings indicate that changes in the regulatory environment affecting institutional investors can alter the optimal disclosure strategy. Managers should monitor international regulatory developments and adjust their disclosure policies accordingly, recognizing that enhanced oversight of their institutional investors may reduce the marginal benefit of voluntary disclosure. For investors, our results suggest that regulatory changes affecting fund managers can indirectly influence the information environment of portfolio companies, potentially affecting investment decision-making and portfolio performance.

These findings contribute to the broader literature on the governance effects of financial regulation and voluntary disclosure. Our results extend the work of Christensen et al. (2013) and Shroff et al. (2013) by demonstrating how international regulations can influence domestic disclosure practices through investor-mediated channels. The negative treatment effect we document after controlling for firm characteristics suggests that the AIFMD may have reduced information asymmetries through enhanced fund manager oversight, thereby decreasing firms' incentives to engage in costly voluntary disclosure activities. This interpretation aligns with the theoretical framework of Verrecchia (1983) and the empirical evidence in Leuz and Verrecchia (2000) regarding the substitutability between different forms of information production and dissemination.

Our study has several limitations that suggest avenues for future research. First, our analysis focuses on aggregate voluntary disclosure measures, and future research could

examine specific types of disclosure to better understand the mechanisms through which the AIFMD influenced corporate transparency. Second, we cannot directly observe the governance mechanisms through which the AIFMD affected U.S. firms, and future studies could explore the role of specific institutional investor types or governance structures in mediating these effects. Third, our analysis is limited to the immediate post-implementation period, and longer-term studies could examine whether the observed effects persist or evolve over time. Future research could also investigate similar spillover effects from other international financial regulations, such as MiFID II or Basel III, to build a more comprehensive understanding of regulatory spillovers in global capital markets. Additionally, examining the heterogeneous effects across different industries or firm characteristics could provide deeper insights into the conditions under which international regulations influence domestic disclosure practices through governance channels.

References

Ajinkya, B., Bhojraj, S., & Sengupta, P. (2005). The association between outside directors, institutional investors, and the properties of management earnings forecasts. Journal of Accounting Research, 43 (3), 343-376.

Beyer, A., Cohen, D. A., Lys, T. Z., & Walther, B. R. (2010). The financial reporting environment: Review of the recent literature. Journal of Accounting and Economics, 50 (2-3), 296-343.

Botosan, C. A. (1997). Disclosure level and the cost of equity capital. The Accounting Review, 72 (3), 323-349.

Brav, A., Jiang, W., Partnoy, F., & Thomas, R. (2008). Hedge fund activism, corporate governance, and firm performance. The Journal of Finance, 63 (4), 1729-1775.

Bushee, B. J. (1998). The influence of institutional investors on myopic R & D investment behavior. The Accounting Review, 73 (3), 305-333.

Bushee, B. J., & Noe, C. F. (2000). Corporate disclosure practices, institutional investors, and stock return volatility. Journal of Accounting Research, 38, 171-202.

Christensen, H. B., Hail, L., & Leuz, C. (2013). Mandatory IFRS reporting and changes in enforcement. Journal of Accounting and Economics, 56 (2-3), 147-177.

Christensen, H. B., Hail, L., & Leuz, C. (2016). Capital-market effects of securities regulation: Prior conditions, implementation, and enforcement. The Review of Financial Studies, 29 (11), 2885-2924.

Coffee, J. C. (2007). Law and the market: The impact of enforcement. University of Pennsylvania Law Review, 156 (2), 229-311.

Diamond, D. W., & Verrecchia, R. E. (1991). Disclosure, liquidity, and the cost of capital. The Journal of Finance, 46 (4), 1325-1359.

Dye, R. A. (1985). Disclosure of nonproprietary information. Journal of Accounting Research, 23 (1), 123-145.

Ferran, E., & Alexander, K. (2014). Can soft law bodies be effective? The special case of the European systemic risk board. European Law Review, 39 (6), 751-776.

Ferreira, M. A., & Matos, P. (2008). The colors of investors money: The role of institutional investors around the world. Journal of Financial Economics, 88 (3), 499-533.

Gaspar, J. M., Massa, M., & Matos, P. (2005). Shareholder investment horizons and the market for corporate control. Journal of Financial Economics, 76 (1), 135-165.

Gilson, R. J., & Gordon, J. N. (2013). The agency costs of agency capitalism: Activist investors and the revaluation of governance rights. Columbia Law Review, 113 (4), 863-927.

Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. Journal of Accounting and Economics, 31 (1-3), 405-440.

Hirst, D. E., Koonce, L., & Venkataraman, S. (2008). Management earnings forecasts: A review and framework. Accounting Horizons, 22 (3), 315-338.

Kahan, M., & Rock, E. B. (2007). Hedge funds in corporate governance and corporate control. University of Pennsylvania Law Review, 155 (5), 1021-1093.

Karamanou, I., & Vafeas, N. (2005). The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis. Journal of Accounting Research, 43 (3), 453-486.

Lambert, R., Leuz, C., & Verrecchia, R. E. (2007). Accounting information, disclosure, and the cost of capital. Journal of Accounting Research, 45 (2), 385-420.

Lang, M., & Lundholm, R. (1993). Cross-sectional determinants of analyst ratings of corporate disclosures. Journal of Accounting Research, 31 (2), 246-271.

Lang, M. H., & Lundholm, R. J. (1996). Corporate disclosure policy and analyst behavior. The Accounting Review, 71 (4), 467-492.

Leuz, C., & Wysocki, P. D. (2016). The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research. Journal of Accounting Research, 54 (2), 525-622.

Miller, G. S. (2002). Earnings performance and discretionary disclosure. Journal of Accounting Research, 40 (1), 173-204.

Moloney, N. (2016). Capital markets union: Ever closer union for the EU financial system? European Law Review, 41 (3), 307-359.

Rogers, J. L., & Stocken, P. C. (2005). Credibility of management forecasts. The Accounting Review, 80 (4), 1233-1260.

Skinner, D. J. (1994). Why firms voluntarily disclose bad news. Journal of Accounting Research, 32 (1), 38-60.

Verrecchia, R. E. (1983). Discretionary disclosure. Journal of Accounting and Economics, 5, 179-194.

Verrecchia, R. E. (2001). Essays on disclosure. Journal of Accounting and Economics, 32 (1-3), 97-180.

Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	15,692	0.5913	0.8884	0.0000	0.0000	1.6094
Treatment Effect	15,692	0.5712	0.4949	0.0000	1.0000	1.0000
Institutional ownership	15,692	0.5595	0.3285	0.2614	0.6210	0.8450
Firm size	15,692	6.0051	2.1100	4.4199	5.9902	7.4812
Book-to-market	15,692	0.7451	0.7210	0.3217	0.5901	0.9762
ROA	15,692	-0.0420	0.2522	-0.0329	0.0211	0.0659
Stock return	15,692	-0.0118	0.4912	-0.2998	-0.0832	0.1606
Earnings volatility	15,692	0.1362	0.2658	0.0235	0.0553	0.1398
Loss	15,692	0.3376	0.4729	0.0000	0.0000	1.0000
Class action litigation risk	15,692	0.3533	0.2930	0.1131	0.2561	0.5437
Time Trend	15,692	1.9108	1.4169	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
Alternative Investment Fund Managers Directive AIFMD European Union 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**	**-0.04**	**0.12**	**-0.11**	**0.10**	**0.03**	**-0.04**	**-0.14**	**0.07**
FreqMF	**0.04**	1.00	**0.41**	**0.44**	**-0.17**	**0.22**	-0.01	**-0.16**	**-0.27**	-0.01
Institutional ownership	**-0.04**	**0.41**	1.00	**0.61**	**-0.20**	**0.29**	**-0.06**	**-0.22**	**-0.26**	**0.06**
Firm size	**0.12**	**0.44**	**0.61**	1.00	**-0.38**	**0.36**	**0.04**	**-0.25**	**-0.41**	**0.15**
Book-to-market	**-0.11**	**-0.17**	**-0.20**	**-0.38**	1.00	**0.04**	**-0.20**	**-0.12**	**0.13**	**-0.10**
ROA	**0.10**	**0.22**	**0.29**	**0.36**	**0.04**	1.00	**0.12**	**-0.52**	**-0.59**	**-0.07**
Stock return	**0.03**	-0.01	**-0.06**	**0.04**	**-0.20**	**0.12**	1.00	0.01	**-0.14**	0.01
Earnings volatility	**-0.04**	**-0.16**	**-0.22**	**-0.25**	**-0.12**	**-0.52**	0.01	1.00	**0.32**	**0.11**
Loss	**-0.14**	**-0.27**	**-0.26**	**-0.41**	**0.13**	**-0.59**	**-0.14**	**0.32**	1.00	**0.12**
Class action litigation risk	**0.07**	-0.01	**0.06**	**0.15**	**-0.10**	**-0.07**	0.01	**0.11**	**0.12**	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 Alternative Investment Fund Managers Directive AIFMD European Union on Management Forecast Frequency

	(1)	(2)	(3)
Treatment Effect	0.0641*** (7.17)	-0.0219** (2.00)	-0.0186** (2.03)
Institutional ownership		0.5646*** (12.29)	0.0602** (2.08)
Firm size		0.1162*** (12.51)	0.0484*** (4.84)
Book-to-market		-0.0306** (2.46)	-0.0014 (0.14)
ROA		0.0250 (0.76)	0.0462** (2.12)
Stock return		-0.0399*** (3.65)	-0.0101 (1.34)
Earnings volatility		-0.0293 (0.88)	-0.0104 (0.23)
Loss		-0.1577*** (7.86)	-0.0527*** (4.51)
Class action litigation risk		-0.1664*** (5.82)	-0.0134 (1.08)
Time Trend		0.0088* (1.91)	0.0165*** (4.30)
Firm fixed effects	No	No	Yes
N	15,692	15,692	15,692
R^2	0.0013	0.2381	0.9027

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