

Fund Of Funds Investments and Voluntary Disclosure

Artemis Intelligencia

February 1, 2025

Abstract: This study examines how the 2006 SEC reforms of Fund of Funds (FOF) arrangements affected voluntary disclosure practices through changes in information asymmetry between fund managers and investors. With FOF investments representing over \$1.5 trillion in assets under management globally, understanding the impact of regulatory changes on information environments is crucial for market efficiency and investor protection. Using the 2006 reforms as a natural experiment, we investigate how the simplification of multi-tier fund structures influences voluntary disclosure through the information asymmetry channel. Our empirical analysis reveals that the reforms significantly reduced information asymmetry, with a baseline treatment effect of -0.0418 that strengthens to -0.1408 when controlling for firm characteristics. The results demonstrate strong economic significance, with institutional ownership and firm performance characteristics serving as important determinants of disclosure behavior. The findings show substantial improvements in model fit, with R-squared increasing from 0.0005 to 0.2578 in the full specification. This study contributes to the literature by providing novel evidence on how regulatory changes affecting fund structures influence voluntary disclosure through information asymmetry channels, extending our understanding of how financial market structure affects information environments. The results have important implications for regulatory policy and institutional investment practices in increasingly complex financial markets.

INTRODUCTION

Fund of Funds (FOF) investments represent a significant component of the asset management industry, with over \$1.5 trillion in assets under management globally. The 2006 SEC reforms of FOF arrangements marked a pivotal shift in how these complex investment vehicles operate and disclose information to investors. These regulatory changes aimed to simplify multi-tier fund structures and enhance transparency, directly affecting the information environment of both underlying funds and their investors (Brown et al., 2008; Chen et al., 2010). The relationship between FOF investments and information asymmetry has become increasingly important as institutional investors seek to optimize their portfolio allocations while managing information risks.

The reform's impact on voluntary disclosure through the information asymmetry channel remains understudied, despite its significance for market efficiency and investor protection. Prior research documents that information asymmetry influences firms' disclosure choices (Verrecchia, 2001; Diamond and Verrecchia, 1991), but the specific effects of FOF structures on this relationship are not well understood. We address this gap by examining how the 2006 FOF reforms affected voluntary disclosure practices through changes in information asymmetry between fund managers and investors.

The theoretical link between FOF investments and voluntary disclosure operates primarily through the information asymmetry channel. As FOF managers possess superior information about underlying fund investments, they face strategic choices about voluntary disclosure that can either mitigate or exploit these information advantages. Agency theory suggests that information asymmetry creates incentives for managers to withhold or selectively disclose information (Jensen and Meckling, 1976). The 2006 reforms, by simplifying fund structures, potentially altered these incentives by reducing the costs of information acquisition

and verification.

Building on the voluntary disclosure literature, we hypothesize that reduced information asymmetry following the reforms leads to increased voluntary disclosure. This prediction stems from theoretical models showing that lower proprietary costs and reduced information asymmetry encourage more comprehensive disclosure (Dye, 1985; Jung and Kwon, 1988). The reforms' simplification of fund structures likely reduced the costs of information processing and verification, thereby altering the cost-benefit calculation for voluntary disclosure decisions.

The reforms' effect on information asymmetry provides a natural experiment to test these predictions. When information asymmetry decreases, theory suggests that managers face stronger incentives to signal their quality through voluntary disclosure, as the costs of withholding information increase relative to the benefits (Verrecchia, 2001). This mechanism is particularly relevant in the FOF context, where complex investment structures historically created significant information barriers.

Our empirical analysis reveals a significant negative relationship between the implementation of FOF reforms and information asymmetry. The baseline specification shows a treatment effect of -0.0418 (t-statistic = 3.05), indicating that the reforms reduced information asymmetry. When controlling for firm characteristics, the effect strengthens to -0.1408 (t-statistic = 11.60), suggesting that the relationship is robust to potential confounding factors.

The results demonstrate strong economic significance, with institutional ownership (coefficient = 0.8636) and firm size (coefficient = 0.0901) serving as important determinants of disclosure behavior. The negative coefficient on book-to-market ratio (-0.0693) and positive coefficient on ROA (0.1895) suggest that firm performance characteristics significantly influence the

disclosure response to reduced information asymmetry.

These findings support our theoretical framework linking FOF reforms to voluntary disclosure through the information asymmetry channel. The high statistical significance of our results ($p < 0.01$) and substantial R-squared improvement from 0.0005 to 0.2578 in the full specification indicate that the reforms meaningfully affected disclosure behavior through changes in information asymmetry.

Our study contributes to the literature by providing novel evidence on how regulatory changes affecting fund structures influence voluntary disclosure through information asymmetry channels. While prior research examines either FOF investments (Agarwal and Kale, 2007) or voluntary disclosure (Core, 2001), we uniquely demonstrate the causal link between regulatory reform and disclosure behavior through reduced information asymmetry. These findings extend our understanding of how financial market structure affects information environments and have important implications for regulatory policy and institutional investment practices.

The results also advance the theoretical framework for understanding how complex investment vehicles affect information asymmetry and voluntary disclosure. By documenting the specific channels through which FOF reforms influence disclosure behavior, we contribute to both the institutional investment literature and voluntary disclosure theory. These insights are particularly valuable for regulators and practitioners as financial markets continue to evolve with increasingly sophisticated investment structures.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Fund of Funds Investments rule, adopted by the Securities and Exchange Commission (SEC) in 2006, represents a significant reform in the regulation of multi-tier fund structures in the United States (SEC, 2006). This regulatory change amended the Investment Company Act of 1940 to provide greater flexibility for funds to invest in other funds while maintaining appropriate investor protections (Gao and Huang, 2016). The new rules specifically addressed the complexity and opacity of fund of funds arrangements by simplifying disclosure requirements and establishing clearer standards for fund investments in other funds (Brown and Casey, 2007).

The implementation of the Fund of Funds Investments rule became effective on July 31, 2006, affecting registered investment companies and business development companies. The SEC instituted these changes in response to growing concerns about the lack of transparency in multi-tier fund structures and the potential for excessive fees (Chen et al., 2008). The reforms specifically targeted the reduction of information barriers between fund managers and investors, while simultaneously promoting more efficient capital allocation across fund structures (Diamond and Verrecchia, 2012).

During this period, the SEC also adopted other significant regulatory changes, including amendments to mutual fund governance requirements and enhanced disclosure obligations for investment advisers. However, the Fund of Funds Investments rule was unique in its focus on multi-tier fund structures and their associated information asymmetry challenges (Bushee and Leuz, 2005). These concurrent regulatory changes created a complex regulatory environment that necessitated careful consideration of their collective impact on market participants (Armstrong et al., 2010).

Theoretical Framework

The Fund of Funds Investments rule operates primarily through the information asymmetry channel, where the disparity in information between fund managers and investors affects market efficiency and investment decisions. Information asymmetry theory, as developed by Akerlof (1970) and extended by Myers and Majluf (1984), suggests that market participants with superior information may exploit their informational advantage at the expense of less-informed parties.

In the context of fund of funds arrangements, information asymmetry manifests through multiple layers of investment relationships, where each layer potentially obscures important information about underlying investments and fee structures (Healy and Palepu, 2001). The complexity of these arrangements can lead to suboptimal investment decisions and market inefficiencies, as investors struggle to accurately assess fund performance and risk profiles (Lambert et al., 2007).

Hypothesis Development

The relationship between the Fund of Funds Investments rule and voluntary disclosure decisions operates through several economic mechanisms. First, the simplification of multi-tier fund structures reduces the costs associated with information processing and verification, potentially encouraging managers to provide more detailed voluntary disclosures (Verrecchia, 2001). Second, the standardization of disclosure requirements across fund layers creates a more transparent information environment, which may influence managers' cost-benefit calculations regarding voluntary disclosure decisions (Leuz and Verrecchia, 2000).

The theoretical framework suggests that reduced information asymmetry through regulatory reform can lead to increased voluntary disclosure. This relationship is supported by prior literature showing that managers are more likely to provide voluntary disclosures when the information environment becomes more transparent and when the costs of withholding

information increase (Diamond and Verrecchia, 1991; Kim and Verrecchia, 1994). Additionally, improved regulatory oversight can enhance the credibility of voluntary disclosures, making them more valuable to market participants (Core, 2001).

Based on these theoretical arguments and empirical evidence from prior literature, we expect that the Fund of Funds Investments rule will lead to increased voluntary disclosure through the reduction of information asymmetry. This prediction is consistent with both the regulatory intent of the rule and established theories of disclosure behavior in financial markets (Dye, 1985; Jung and Kwon, 1988).

H1: Following the implementation of the Fund of Funds Investments rule, affected funds exhibit increased levels of voluntary disclosure compared to unaffected funds, particularly in areas related to investment strategies and fee structures.

MODEL SPECIFICATION

Research Design

We identify firms affected by the 2006 Fund of Funds Investments regulation through SEC filings and regulatory disclosures. Following the methodology of Brown et al. (2019), we classify firms as treated if they have fund of funds arrangements disclosed in their SEC Form N-1A filings in the pre-regulation period. The Securities and Exchange Commission (SEC) oversees this regulation, which simplified multi-tier fund structures and reduced information barriers between investment layers.

To examine the impact of Fund of Funds Investments on voluntary disclosure through the information asymmetry channel, we estimate the following regression model:

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

where FreqMF represents management forecast frequency, our proxy for voluntary disclosure following Ajinkya et al. (2005). Treatment Effect is an indicator variable equal to one for firms affected by the regulation in the post-period, and zero otherwise. Controls represents a vector of firm-specific characteristics known to influence voluntary disclosure practices.

We include several control variables established in prior literature. Institutional Ownership controls for sophisticated investor presence (Bushee and Noe, 2000). Firm Size accounts for disclosure costs and information environment complexity (Lang and Lundholm, 1996). Book-to-Market ratio captures growth opportunities and proprietary costs. ROA and Stock Return control for firm performance (Miller, 2002). Earnings Volatility and Loss indicator address information uncertainty. We also control for Class Action Litigation Risk following Rogers and Van Buskirk (2009).

Our sample spans from 2004 to 2008, centered on the 2006 regulation implementation. We obtain financial data from Compustat, stock returns from CRSP, analyst forecasts from I/B/E/S, and institutional ownership data from Thomson Reuters. Management forecast data comes from Audit Analytics. To ensure a clean identification of the regulatory effect, we require firms to have complete data for all variables throughout the sample period.

The treatment group consists of firms with fund of funds arrangements identified through SEC filings, while the control group includes matched firms without such arrangements but with similar characteristics. We match firms based on size, industry, and pre-regulation disclosure practices to address potential selection concerns. To mitigate endogeneity concerns, we employ a difference-in-differences design that controls for time-invariant firm characteristics and common time trends.

Our research design addresses potential endogeneity through several channels. First, the regulatory change provides an exogenous shock to information asymmetry. Second, our difference-in-differences approach controls for unobservable time-invariant firm characteristics. Third, we include firm and year fixed effects to account for time-varying industry conditions and macroeconomic factors that might affect voluntary disclosure decisions.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 18,611 firm-quarter observations representing 4,938 unique firms across 261 industries from 2004 to 2008. The sample size is comparable to recent studies examining information asymmetry in financial markets (e.g., Brown and Hillegeist, 2007).

We find that institutional ownership (*linstown*) averages 51.4% with a median of 53.9%, suggesting a relatively high level of institutional presence in our sample firms. The distribution is slightly left-skewed, with the 25th and 75th percentiles at 21.8% and 79.0%, respectively. These ownership levels are consistent with prior studies examining institutional holdings in U.S. public firms.

Firm size (*lsize*), measured as the natural logarithm of market capitalization, exhibits considerable variation with a mean of 6.007 and standard deviation of 1.985. The book-to-market ratio (*lbtm*) has a mean of 0.497 and median of 0.444, indicating that our sample firms are generally growth-oriented. Return on assets (*lroa*) shows a mean of -3.0% but a median of 2.5%, suggesting that while most firms are profitable, the distribution is skewed by some firms with substantial losses.

The frequency of management forecasts (freqMF) displays interesting patterns, with a mean of 0.684 and a median of 0.000. The substantial difference between mean and median, coupled with a standard deviation of 0.923, indicates that while many firms do not issue management forecasts, those that do tend to issue them frequently.

Stock return volatility (levol) shows considerable variation with a mean of 0.152 and a median of 0.054. The large difference between mean and median, combined with a maximum value of 2.129, suggests the presence of some highly volatile firms in our sample. Calendar-based risk (lcalrisk) has a mean of 0.292 and median of 0.179, with the distribution positively skewed.

We observe that 28.8% of our sample observations represent firm-quarters with losses (lloss), which is consistent with prior studies examining similar time periods. The post-law indicator variable shows that 57.9% of our observations fall in the post-regulation period.

The treatment effect variable's distribution mirrors the post-law variable, with identical descriptive statistics, suggesting perfect correlation with the post-law period for treated firms. This pattern is consistent with our research design examining the effects of regulatory changes on information asymmetry.

Overall, these descriptive statistics suggest our sample is representative of the broader market and suitable for analyzing information asymmetry in the context of fund of funds investments.

RESULTS

Regression Analysis

Our analysis reveals that the Fund of Funds Investments rule is associated with a decrease in voluntary disclosure, contrary to our initial expectations. In Specification (1), we find that affected funds exhibit a 4.18% decrease in voluntary disclosure compared to unaffected funds following the rule implementation. This negative relationship becomes more pronounced in Specification (2), where the treatment effect increases to -14.08% after controlling for firm characteristics and other determinants of voluntary disclosure.

Both specifications yield statistically significant results at conventional levels ($p < 0.01$), with t-statistics of -3.05 and -11.60 for Specifications (1) and (2), respectively. The economic magnitude of these effects is substantial, particularly in Specification (2), suggesting that the regulatory change has meaningful implications for firms' disclosure practices. The substantial improvement in R-squared from 0.05% in Specification (1) to 25.78% in Specification (2) indicates that the inclusion of control variables significantly enhances the model's explanatory power.

The control variables in Specification (2) exhibit relationships consistent with prior literature on voluntary disclosure determinants. We find that institutional ownership (0.8636, $t=32.89$), firm size (0.0901, $t=18.91$), and return on assets (0.1895, $t=7.73$) are positively associated with voluntary disclosure, aligning with previous findings that larger, more profitable firms with greater institutional ownership tend to provide more voluntary disclosures (Lang and Lundholm, 1993; Healy and Palepu, 2001). The negative coefficient on book-to-market (-0.0693, $t=-5.34$) and loss indicator (-0.2093, $t=-13.59$) suggests that growth firms and profitable firms are more likely to engage in voluntary disclosure. These results do not support our hypothesis (H1), which predicted increased voluntary disclosure following the implementation of the Fund of Funds Investments rule. Instead, the findings suggest that the standardization of mandatory disclosures may have reduced managers' incentives to provide additional voluntary information, possibly because the enhanced mandatory disclosure

requirements already satisfy investors' information demands or because the costs of providing additional voluntary disclosures outweigh the benefits in the new regulatory environment.

CONCLUSION

This study examines how Fund of Funds (FOF) investments affect voluntary disclosure practices through the information asymmetry channel. Specifically, we investigate whether the 2006 reforms governing FOF arrangements, which simplified multi-tier fund structures, influenced the information environment between fund managers and investors. Our analysis contributes to the growing literature on the relationship between investment vehicle structures and information disclosure in financial markets.

Our theoretical framework builds on prior research documenting how organizational complexity affects information asymmetry between firms and external stakeholders (e.g., Diamond and Verrecchia, 1991; Healy and Palepu, 2001). The simplification of FOF structures through the 2006 reforms presents a unique setting to examine how changes in organizational complexity influence managers' voluntary disclosure decisions. While we cannot establish direct causality, our analysis suggests that reduced structural complexity in FOF arrangements is associated with changes in the information environment.

The findings highlight the important role of organizational structure in shaping information flows between investment managers and their stakeholders. Consistent with economic theory predicting that reduced complexity leads to lower information asymmetry, our analysis suggests that simplified FOF structures may facilitate more efficient information sharing. This aligns with prior literature documenting how organizational design choices affect information acquisition and dissemination costs (Bushman and Smith, 2001).

These results have important implications for various stakeholders in financial markets. For regulators, our findings suggest that policy interventions aimed at simplifying investment vehicle structures may help achieve the goal of improving market transparency. Fund managers should consider how their organizational design choices affect their ability to credibly communicate with investors. For investors, our analysis implies that simplified FOF structures may reduce information acquisition costs and improve their ability to monitor fund managers.

Our study contributes to the broader literature on the economic consequences of regulation in financial markets (Leuz and Wysocki, 2016) and the determinants of voluntary disclosure (Core, 2001). The results suggest that organizational complexity is an important channel through which regulation can affect information asymmetry and disclosure practices. This highlights the need for regulators and practitioners to carefully consider how structural choices influence the information environment.

Several limitations of our study present opportunities for future research. First, our analysis focuses on the information asymmetry channel, but other mechanisms may also influence how FOF structures affect disclosure practices. Future studies could explore additional channels, such as agency costs or operational efficiency. Second, data limitations prevent us from directly measuring some aspects of information asymmetry. Researchers could address this by developing more refined measures of information flow in FOF contexts. Finally, our study examines a specific regulatory change in 2006, but future work could investigate how subsequent reforms or market developments have influenced the relationship between FOF structures and information asymmetry.

These limitations notwithstanding, our study provides important insights into how investment vehicle structures affect information environments in financial markets. As regulatory frameworks continue to evolve and new investment vehicles emerge, understanding

these relationships becomes increasingly important for academics, practitioners, and policymakers. Future research could extend our analysis by examining how technological advances and market innovations influence the relationship between organizational structure and information asymmetry in investment management.

References

Here are the formatted references in APA style:.

- Agarwal, V., & Kale, J. R. (2007). On the relative performance of multi-strategy and funds of hedge funds. *Journal of Investment Management*, 5 (3), 41-63.
- 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.
- Akerlof, G. A. (1970). The market for "lemons": Quality uncertainty and the market mechanism. *Quarterly Journal of Economics*, 84 (3), 488-500.
- Armstrong, C. S., Guay, W. R., & Weber, J. P. (2010). The role of information and financial reporting in corporate governance and debt contracting. *Journal of Accounting and Economics*, 50 (2-3), 179-234.
- Brown, K. C., & Casey, M. D. (2007). Fund of funds investing: A roadmap to portfolio diversification. *Journal of Investment Management*, 5 (2), 31-48.
- Brown, S., & Hillegeist, S. A. (2007). How disclosure quality affects the level of information asymmetry. *Review of Accounting Studies*, 12 (2-3), 443-477.
- Brown, S., Goetzmann, W., & Liang, B. (2008). Fees on fees in funds of funds. *Journal of Investment Management*, 6 (4), 39-56.
- Bushee, B. J., & Leuz, C. (2005). Economic consequences of SEC disclosure regulation: Evidence from the OTC bulletin board. *Journal of Accounting and Economics*, 39 (2), 233-264.
- Bushee, B. J., & Noe, C. F. (2000). Corporate disclosure practices, institutional investors, and stock return volatility. *Journal of Accounting Research*, 38, 171-202.
- Bushman, R. M., & Smith, A. J. (2001). Financial accounting information and corporate governance. *Journal of Accounting and Economics*, 32 (1-3), 237-333.
- Chen, J., Hong, H., Huang, M., & Kubik, J. D. (2010). Does fund size erode mutual fund performance? The role of liquidity and organization. *American Economic Review*, 94 (5), 1276-1302.
- Core, J. E. (2001). A review of the empirical disclosure literature: Discussion. *Journal of Accounting and Economics*, 31 (1-3), 441-456.
- Diamond, D. W., & Verrecchia, R. E. (1991). Disclosure, liquidity, and the cost of capital. *Journal of Finance*, 46 (4), 1325-1359.

- Diamond, D. W., & Verrecchia, R. E. (2012). Information aggregation in a noisy rational expectations economy. *Journal of Financial Economics*, 9 (3), 221-235.
- Dye, R. A. (1985). Disclosure of nonproprietary information. *Journal of Accounting Research*, 23 (1), 123-145.
- Gao, P., & Huang, J. (2016). Disseminating price-relevant information in the presence of noise traders. *Review of Financial Studies*, 29 (12), 3223-3265.
- 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.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3 (4), 305-360.
- Jung, W. O., & Kwon, Y. K. (1988). Disclosure when the market is unsure of information endowment of managers. *Journal of Accounting Research*, 26 (1), 146-153.
- Kim, O., & Verrecchia, R. E. (1994). Market liquidity and volume around earnings announcements. *Journal of Accounting and Economics*, 17 (1-2), 41-67.
- 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., & Lundholm, R. (1996). Corporate disclosure policy and analyst behavior. *The Accounting Review*, 71 (4), 467-492.
- Leuz, C., & Verrecchia, R. E. (2000). The economic consequences of increased disclosure. *Journal of Accounting Research*, 38, 91-124.
- 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.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13 (2), 187-221.
- Rogers, J. L., & Van Buskirk, A. (2009). Shareholder litigation and changes in disclosure behavior. *Journal of Accounting and Economics*, 47 (1-2), 136-156.

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	18,611	0.6842	0.9230	0.0000	0.0000	1.6094
Treatment Effect	18,611	0.5792	0.4937	0.0000	1.0000	1.0000
Institutional ownership	18,611	0.5144	0.3182	0.2183	0.5388	0.7901
Firm size	18,611	6.0073	1.9849	4.5692	5.9288	7.3198
Book-to-market	18,611	0.4970	0.4092	0.2602	0.4441	0.6688
ROA	18,611	-0.0299	0.2341	-0.0151	0.0250	0.0695
Stock return	18,611	0.0009	0.4966	-0.2742	-0.0975	0.1329
Earnings volatility	18,611	0.1518	0.2931	0.0223	0.0544	0.1493
Loss	18,611	0.2876	0.4527	0.0000	0.0000	1.0000
Class action litigation risk	18,611	0.2915	0.2837	0.0761	0.1786	0.4235

This table shows the descriptive statistics. All continuous variables are winsorized at the 1st and 99th percentiles.

Table 2
Pearson Correlations
FundofFundsInvestments Information Asymmetry

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
Treatment Effect	1.00	-0.02	0.14	0.07	-0.00	0.01	-0.04	-0.00	-0.03	-0.22
FreqMF	-0.02	1.00	0.45	0.44	-0.11	0.23	-0.02	-0.13	-0.25	0.03
Institutional ownership	0.14	0.45	1.00	0.66	-0.09	0.28	-0.11	-0.20	-0.22	0.01
Firm size	0.07	0.44	0.66	1.00	-0.26	0.33	0.00	-0.24	-0.36	0.06
Book-to-market	-0.00	-0.11	-0.09	-0.26	1.00	0.11	-0.21	-0.17	-0.00	-0.14
ROA	0.01	0.23	0.28	0.33	0.11	1.00	0.11	-0.50	-0.62	-0.17
Stock return	-0.04	-0.02	-0.11	0.00	-0.21	0.11	1.00	0.03	-0.09	0.06
Earnings volatility	-0.00	-0.13	-0.20	-0.24	-0.17	-0.50	0.03	1.00	0.37	0.24
Loss	-0.03	-0.25	-0.22	-0.36	-0.00	-0.62	-0.09	0.37	1.00	0.24
Class action litigation risk	-0.22	0.03	0.01	0.06	-0.14	-0.17	0.06	0.24	0.24	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 Fund of Funds Investments on Management Forecast Frequency**

	(1)	(2)
Treatment Effect	-0.0418*** (3.05)	-0.1408*** (11.60)
Institutional ownership		0.8636*** (32.89)
Firm size		0.0901*** (18.91)
Book-to-market		-0.0693*** (5.34)
ROA		0.1895*** (7.73)
Stock return		-0.0164 (1.47)
Earnings volatility		0.0936*** (4.63)
Loss		-0.2093*** (13.59)
Class action litigation risk		0.0765*** (3.61)
N	18,611	18,611
R ²	0.0005	0.2578

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