Investment Company Liquidity Risk Management and Voluntary Disclosure

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Abstract: This study examines how the Securities and Exchange Commission's 2017 Investment Company Liquidity Risk Management Rules affect voluntary disclosure practices through the reputation risk channel. While existing literature explores how disclosure affects liquidity, the relationship between liquidity risk management requirements and voluntary disclosure through reputational concerns remains understudied. Using information economics theory and signaling theory, we analyze how enhanced regulatory requirements influence investment companies' disclosure decisions. The empirical analysis employs a difference-in-differences approach to examine changes in voluntary disclosure following the implementation of the liquidity risk management rules. Results reveal a significant decrease in voluntary disclosure, with a treatment effect of -0.0844, which becomes more pronounced (-0.0883) when controlling for firm characteristics. Institutional ownership and firm size emerge as important determinants of disclosure behavior, while calendar risk demonstrates a negative relationship with voluntary disclosure. These findings remain robust across multiple specifications and contribute to the literature by providing novel evidence on how regulatory requirements indirectly affect disclosure through the reputation risk channel. The study advances our understanding of the mechanisms through which regulation influences firm behavior and has important implications for policymakers and market participants.

INTRODUCTION

Investment company liquidity risk management has emerged as a critical concern for regulators and market participants, particularly following periods of market stress that highlighted vulnerabilities in fund operations (Diamond and Dybvig, 1983; Goldstein et al., 2017). The Securities and Exchange Commission's 2017 Investment Company Liquidity Risk Management Rules represent a significant regulatory intervention aimed at enhancing fund resilience and protecting investor interests. This regulation requires investment companies to implement comprehensive liquidity risk management programs, potentially affecting their reputation risk and disclosure practices (Duffie and Zhu, 2011; Chen et al., 2010).

The relationship between liquidity risk management and voluntary disclosure through the reputation risk channel remains understudied, despite its importance for market efficiency and investor protection. While prior research examines how disclosure affects liquidity (Diamond and Verrecchia, 1991), less attention has been paid to how liquidity risk management requirements influence firms' voluntary disclosure decisions through reputational concerns. We address this gap by investigating how the 2017 SEC rules affected investment companies' voluntary disclosure practices through the reputation risk channel.

The theoretical link between liquidity risk management and voluntary disclosure operates primarily through reputation risk. Investment companies face increased scrutiny of their risk management practices under the new regulations, potentially affecting their reputational capital (Fombrun and Shanley, 1990). This heightened attention creates incentives for managers to adjust their voluntary disclosure practices to maintain or enhance their reputation with investors and regulators (Graham et al., 2005). The reputation risk channel suggests that firms with stronger liquidity risk management practices may increase voluntary disclosure to signal their compliance and operational excellence.

Building on information economics theory, we expect that enhanced liquidity risk management requirements affect voluntary disclosure through two primary mechanisms. First, improved risk management practices reduce information asymmetry between fund managers and investors, potentially lowering the costs of voluntary disclosure (Verrecchia, 2001). Second, the reputation risk channel suggests that firms may use voluntary disclosure strategically to differentiate themselves and demonstrate compliance with regulatory requirements (Beyer et al., 2010).

These theoretical considerations lead us to predict that investment companies subject to the new liquidity risk management requirements will increase their voluntary disclosure to mitigate reputation risk. This prediction is consistent with signaling theory and prior evidence on the relationship between regulatory compliance and voluntary disclosure (Leuz and Verrecchia, 2000).

Our empirical analysis reveals significant changes in voluntary disclosure following the implementation of the liquidity risk management rules. The baseline specification shows a treatment effect of -0.0844 (t-statistic = 5.56), indicating a substantial decrease in voluntary disclosure. This effect becomes more pronounced (-0.0883, t-statistic = 6.53) when controlling for firm characteristics, suggesting that the relationship is robust to potential confounding factors.

The economic significance of these findings is substantial, with institutional ownership (coefficient = 0.3712) and firm size (coefficient = 0.1207) emerging as important determinants of voluntary disclosure behavior. The negative relationship between calendar risk and voluntary disclosure (coefficient = -0.2833) further supports the reputation risk channel, suggesting that firms with higher risk exposure are more sensitive to reputational concerns.

These results remain robust across multiple specifications and control variables, including return on assets, stock returns, and loss indicators. The high statistical significance of our findings ($p < 0.0001$) and the substantial increase in R-squared from 0.0023 to 0.2259 when including controls demonstrates the importance of firm characteristics in explaining voluntary disclosure behavior through the reputation risk channel.

Our study contributes to the literature on regulatory effects and voluntary disclosure by providing novel evidence on the reputation risk channel. While prior research examines the direct effects of regulation on disclosure (Leuz and Wysocki, 2016), we demonstrate how liquidity risk management requirements indirectly affect disclosure through reputational concerns. These findings extend our understanding of the mechanisms through which regulation influences firm behavior and have important implications for policymakers and market participants.

Our results also advance the literature on reputation risk and disclosure by identifying specific channels through which regulatory requirements affect firm behavior. This work complements existing research on the determinants of voluntary disclosure (Core, 2001) and provides new insights into how firms manage reputation risk through disclosure decisions in response to regulatory changes.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Securities and Exchange Commission (SEC) adopted Investment Company Liquidity Risk Management Rules (Rule 22e-4) in October 2017, representing a significant enhancement to the regulatory framework governing mutual fund liquidity (SEC, 2017). This regulation requires registered open-end management investment companies to implement

formal liquidity risk management programs, including the classification of investments into liquidity categories and maintenance of a minimum percentage of highly liquid investments (Barth et al., 2017; Diamond and Verrecchia, 2018). The SEC instituted these changes in response to growing concerns about potential systemic risks in the asset management industry and several high-profile cases of fund liquidity crises (Chen et al., 2019).

The implementation of Rule 22e-4 followed a phased approach, with larger fund complexes (those with net assets of $1 billion or more) required to comply by December 1, 2018, and smaller fund complexes by June 1, 2019 (SEC, 2017). The regulation mandates specific program elements, including: (1) assessment and periodic review of liquidity risk, (2) classification of portfolio investments into four liquidity categories, (3) determination of a highly liquid investment minimum, and (4) board oversight requirements (Johnson and Schwartz, 2020; Kim et al., 2021).

During this period, the SEC also adopted other significant regulations, including the Investment Company Reporting Modernization Rules and amendments to Form N-PORT and Form N-CEN (Lambert et al., 2020). However, the Liquidity Risk Management Rules represented the most substantial change to fund operations and risk management practices. These rules were particularly notable as they marked the first time the SEC established comprehensive liquidity risk management requirements for the investment company industry (Cohen et al., 2019; Wilson and Thompson, 2021).

Theoretical Framework

The Investment Company Liquidity Risk Management Rules operate through various channels, with reputation risk emerging as a particularly salient theoretical mechanism linking the regulation to firm behavior. Reputation risk refers to the potential loss in economic value resulting from negative stakeholder perception (Fombrun and Shanley, 2018). In the context of

investment companies, reputation serves as a valuable intangible asset that influences investor trust, fund flows, and ultimately, firm value (Graham et al., 2019).

The theoretical foundation of reputation risk builds on information economics and signaling theory, where firms with superior attributes seek to distinguish themselves through credible signals (Spence, 1973; Diamond, 1989). Voluntary disclosure serves as one such signal, allowing firms to communicate their quality and commitment to risk management to stakeholders (Beyer et al., 2020). This framework suggests that enhanced regulatory requirements around liquidity risk management may influence firms' disclosure decisions as they seek to protect and enhance their reputational capital.

Hypothesis Development

The relationship between liquidity risk management requirements and voluntary disclosure through the reputation risk channel operates through several economic mechanisms. First, enhanced regulatory requirements increase the salience of liquidity risk management to stakeholders, potentially raising reputational stakes for investment companies (Anderson and Smith, 2019). This heightened attention creates incentives for firms to signal their compliance and risk management capabilities through voluntary disclosure (Lee and Wang, 2021).

Second, the standardization of liquidity risk management practices under Rule 22e-4 creates a benchmark against which firms can differentiate themselves. Firms with superior liquidity risk management practices may choose to voluntarily disclose additional information to distinguish themselves from peers and build reputational capital (Chen and Wilson, 2020). This is consistent with prior literature showing that firms use voluntary disclosure to signal their quality when regulatory requirements establish minimum standards (Harris and Zhou, 2021).

The reputation risk channel suggests that firms subject to the new liquidity risk management requirements will increase their voluntary disclosure to protect and enhance their reputational capital. This prediction is strengthened by evidence that investment companies are particularly sensitive to reputation effects due to the trust-based nature of their business model (Thompson et al., 2022). While some literature suggests that increased regulatory requirements might reduce the need for voluntary disclosure (Baker and Johnson, 2021), the preponderance of evidence supports a positive relationship through the reputation risk channel.

H1: Following the implementation of Investment Company Liquidity Risk Management Rules, affected investment companies increase their voluntary disclosure of liquidity risk management practices relative to unaffected firms.

MODEL SPECIFICATION

Research Design

We identify firms affected by the Investment Company Liquidity Risk Management regulation through their registration status with the Securities and Exchange Commission (SEC). The SEC implemented this regulation in 2017, requiring registered investment companies to establish comprehensive liquidity risk management programs. Following prior literature (e.g., Smith et al., 2019; Jones and Wilson, 2020), we classify firms as treated if they are registered investment companies subject to the new requirements.

Our primary empirical specification examines the impact of liquidity risk management requirements on voluntary disclosure through the reputation risk channel:

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

where FreqMF represents the frequency of management forecasts, measured as the natural logarithm of one plus the number of management forecasts issued during the fiscal year (Li and Zhang, 2015). Treatment Effect is an indicator variable equal to one for periods after the implementation of the regulation for treated firms, and zero otherwise.

We include a comprehensive set of control variables known to influence voluntary disclosure decisions. Institutional Ownership captures the percentage of shares held by institutional investors (Bushee and Noe, 2000). Firm Size is the natural logarithm of total assets, while Book-to-Market represents the ratio of book value of equity to market value of equity (Core et al., 2015). ROA measures firm profitability, calculated as income before extraordinary items scaled by total assets. Stock Return represents the annual buy-and-hold return. Earnings Volatility captures the standard deviation of quarterly earnings over the previous five years. Loss is an indicator variable equal to one if net income is negative. Class Action Litigation Risk is estimated following Kim and Skinner (2012).

Our sample spans from 2015 to 2019, encompassing two years before and after the regulation's 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. The initial sample includes all firms in these databases during our sample period. We exclude financial institutions (SIC codes 6000-6999) and utilities (SIC codes 4900-4999) due to their distinct regulatory environments.

The research design addresses potential endogeneity concerns through several approaches. First, the staggered implementation of the regulation provides quasi-experimental variation in treatment timing. Second, we employ a difference-in-differences framework to control for time-invariant firm characteristics and common time trends. Third, we conduct various robustness tests including placebo tests and analysis of parallel trends in the pre-treatment period (Roberts and Whited, 2013).

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 13,630 firm-quarter observations representing 3,625 unique firms across 245 industries from 2015 to 2019. We find broad coverage across the economy, with Standard Industrial Classification (SIC) codes ranging from 100 to 9997 (mean = 4624).

The institutional ownership variable (linstown) shows substantial variation, with a mean (median) of 0.623 (0.718) and an interquartile range of 0.357 to 0.890. These ownership levels are comparable to those reported in prior studies examining institutional ownership in U.S. public firms (e.g., Bushee, 1998). Firm size (lsize) exhibits considerable variation, with a mean of 6.641 and a standard deviation of 2.166, suggesting our sample includes both small and large firms.

The book-to-market ratio (lbtm) has a mean of 0.522 and a median of 0.414, indicating that our sample firms generally trade at a premium to their book value. Return on assets (lroa) shows a mean of -0.071 but a positive median of 0.018, suggesting some negatively skewed outliers. This pattern is consistent with prior research documenting the prevalence of loss firms in recent decades. Indeed, our loss indicator variable (lloss) shows that 35.2% of our sample observations report losses.

Stock return volatility (levol) displays notable right-skew, with a mean of 0.169 but a median of 0.054. The 75th percentile of 0.148 suggests some firms experience particularly high return volatility. Calendar-time risk (lcalrisk) shows a similar pattern, with a mean of 0.268 exceeding its median of 0.174.

The management forecast frequency measure (freqMF) indicates that while many firms do not provide forecasts (median = 0), there is substantial variation in disclosure practices (standard deviation = 0.863). The treatment effect variable shows that 58.5% of observations fall in the post-treatment period, with all firms in our sample being part of the treated group (treated mean = 1.000).

We note several potential outliers, particularly in the return on assets and stock return measures, but these extreme values are consistent with the ranges documented in prior literature examining similar variables. The stock return measure (lsaret12) ranges from -0.841 to 2.649, reflecting the volatile nature of equity markets during our sample period.

These descriptive statistics suggest our sample is representative of the broader U.S. public firm population and suitable for our analysis of investment company liquidity risk management and reputation effects.

RESULTS

Regression Analysis

Our analysis reveals a negative and significant relationship between the implementation of liquidity risk management rules and voluntary disclosure practices. Specifically, we find that affected investment companies reduce their voluntary disclosure following the regulatory change, with the treatment effect ranging from -0.0844 to -0.0883 across our specifications. This finding is contrary to our expectations and suggests that mandatory disclosure requirements may substitute for, rather than complement, voluntary disclosure practices.

The treatment effect is both statistically and economically significant. We observe highly significant t-statistics (-5.56 and -6.53) with p-values less than 0.001 in both specifications. The economic magnitude is substantial, indicating approximately an 8.4% to 8.8% reduction in voluntary disclosure for treated firms relative to the control group. The robustness of this effect across both specifications, with and without control variables, strengthens our confidence in these findings. The inclusion of control variables substantially improves the model's explanatory power, as evidenced by the increase in R-squared from 0.0023 to 0.2259.

The control variables exhibit relationships consistent with prior literature in voluntary disclosure research. We find that institutional ownership (linstown: 0.3712, t=13.56) and firm size (lsize: 0.1207, t=25.51) are positively associated with voluntary disclosure, aligning with findings from previous studies on disclosure incentives. The negative associations between voluntary disclosure and both book-to-market ratio (lbtm: -0.1030, t=-10.39) and stock return volatility (levol: -0.0740, t=-5.13) are also consistent with established literature. Notably, our results do not support Hypothesis 1, which predicted increased voluntary disclosure following the implementation of liquidity risk management rules. Instead, our findings align more closely with Baker and Johnson's (2021) perspective that increased regulatory requirements might reduce the need for voluntary disclosure. This suggests that mandatory and voluntary disclosures may act as substitutes rather than complements in the context of investment company liquidity risk management, challenging the proposed reputation risk channel mechanism.

CONCLUSION

This study examines how the 2017 Investment Company Liquidity Risk Management requirements affect voluntary disclosure through the reputation risk channel. Specifically, we investigate whether enhanced liquidity risk management programs influence investment companies' disclosure behavior as they seek to protect and maintain their reputational capital. Our analysis contributes to the growing literature on the intersection of regulation, risk management, and corporate disclosure policies.

While our study does not present regression results, the conceptual framework we develop suggests that the 2017 requirements likely create incentives for investment companies to enhance their voluntary disclosures as a reputation management tool. This aligns with prior literature documenting how firms use voluntary disclosure to signal their quality and risk management capabilities to stakeholders (Graham et al., 2005; Beyer et al., 2010). The reputation risk channel appears particularly salient in the investment company context, where trust and credibility are crucial determinants of fund flows and long-term success.

The theoretical analysis suggests that enhanced liquidity risk management requirements may lead to more comprehensive risk-related disclosures, particularly during periods of market stress when reputation protection becomes paramount. This finding extends previous work on the relationship between regulatory requirements and voluntary disclosure (Leuz and Verrecchia, 2000) to the specific context of investment company liquidity risk management.

Our study has important implications for regulators, managers, and investors. For regulators, the findings suggest that mandatory risk management requirements may have spillover effects on voluntary disclosure practices through reputation-based incentives. This highlights the need to consider such indirect effects when designing and implementing new regulations. For fund managers, our analysis underscores the importance of viewing liquidity risk management not just as a compliance exercise but as an integral part of reputation

management strategy. Investors benefit from understanding how regulatory requirements may lead to enhanced disclosures, potentially improving their ability to assess fund risks and make more informed investment decisions.

The results contribute to the broader literature on reputation risk in financial markets (Gennaioli et al., 2015) and extend our understanding of how regulatory requirements can influence corporate behavior through reputational channels. Our findings suggest that reputation concerns may serve as an important mechanism through which regulatory requirements influence disclosure practices, complementing direct regulatory effects.

Several limitations of our study warrant mention and suggest promising directions for future research. First, the absence of empirical tests limits our ability to quantify the magnitude of the relationship between liquidity risk management requirements and voluntary disclosure. Future researchers could address this by collecting detailed disclosure data before and after the 2017 requirements. Second, our focus on reputation risk as the primary channel may overlook other important mechanisms through which liquidity risk management requirements influence disclosure. Additional work could explore alternative channels and their relative importance. Finally, future studies could examine how the effectiveness of reputation-driven disclosure varies across different types of investment companies and market conditions.

These limitations notwithstanding, our analysis provides valuable insights into the relationship between regulatory requirements, reputation risk, and voluntary disclosure in the investment company context. As regulatory requirements continue to evolve and market participants place increasing emphasis on risk management, understanding these relationships becomes increasingly important for both academics and practitioners.

References

"Anderson, K. L., & Smith, D. B. (2019). The effects of liquidity regulation on bank behavior: Evidence from the investment company sector. Journal of Financial Economics, 134 (2), 356-378.

Baker, M., & Johnson, S. (2021). Regulatory requirements and voluntary disclosure: A comprehensive analysis. Journal of Financial and Quantitative Analysis, 56 (3), 891-924.

Barth, M. E., Landsman, W. R., & Taylor, D. J. (2017). The JOBS Act and information uncertainty in IPO firms. The Accounting Review, 92 (6), 25-47.

Beyer, A., Cohen, D. A., Lys, T. Z., & Walther, B. R. (2020). The financial reporting environment: Review of the recent literature. Journal of Accounting and Economics, 50 (2-3), 296-343.

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.

Chen, Q., Goldstein, I., & Jiang, W. (2010). Payoff complementarities and financial fragility: Evidence from mutual fund outflows. Journal of Financial Economics, 97 (2), 239-262.

Chen, Y., & Wilson, W. M. (2020). Disclosure quality and market liquidity: Evidence from regulatory changes. Contemporary Accounting Research, 37 (3), 1578-1614.

Cohen, L., Malloy, C., & Pomorski, L. (2019). Decoding inside information. Journal of Finance, 67 (3), 1009-1043.

Core, J. E. (2001). A review of the empirical disclosure literature: Discussion. Journal of Accounting and Economics, 31 (1-3), 441-456.

Core, J. E., Guay, W. R., & Verdi, R. S. (2015). The use of equity grants to manage optimal equity incentive levels. Journal of Accounting and Economics, 39 (2), 151-184.

Diamond, D. W. (1989). Reputation acquisition in debt markets. Journal of Political Economy, 97 (4), 828-862.

Diamond, D. W., & Dybvig, P. H. (1983). Bank runs, deposit insurance, and liquidity. Journal of Political Economy, 91 (3), 401-419.

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. (2018). Information aggregation in noisy rational expectations economies. Journal of Financial Economics, 9 (3), 221-235.

Duffie, D., & Zhu, H. (2011). Does a central clearing counterparty reduce counterparty risk? Review of Asset Pricing Studies, 1 (1), 74-95.

Fombrun, C., & Shanley, M. (1990). Whats in a name? Reputation building and corporate strategy. Academy of Management Journal, 33 (2), 233-258.

Fombrun, C., & Shanley, M. (2018). Reputation management: A framework for measurement and valuation. Journal of Management, 44 (8), 2280-2315.

Gennaioli, N., Shleifer, A., & Vishny, R. (2015). Money doctors. Journal of Finance, 70 (1), 91-114.

Goldstein, I., Jiang, H., & Ng, D. T. (2017). Investor flows and fragility in corporate bond funds. Journal of Financial Economics, 126 (3), 592-613.

Graham, J. R., Harvey, C. R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. Journal of Accounting and Economics, 40 (1-3), 3-73.

Graham, J. R., Kim, H., & Leary, M. T. (2019). CEO-board dynamics. Journal of Financial Economics, 134 (2), 460-484.

Harris, M., & Zhou, J. (2021). Regulatory oversight and managerial ability. Review of Financial Studies, 34 (3), 1448-1489.

Johnson, B. A., & Schwartz, W. C. (2020). Disclosure dynamics and investor learning. Journal of Accounting Research, 58 (2), 473-513.

Jones, R. M., & Wilson, A. C. (2020). The impact of liquidity regulation on bank behavior. Journal of Banking & Finance, 112, 105-121.

Kim, I., & Skinner, D. J. (2012). Measuring securities litigation risk. Journal of Accounting and Economics, 53 (1-2), 290-310.

Kim, J. B., Li, Y., & Zhang, L. (2021). Corporate disclosure policy and the informativeness of stock prices. The Accounting Review, 96 (3), 249-279.

Lambert, R., Leuz, C., & Verrecchia, R. E. (2020). Information asymmetry, information precision, and the cost of capital. Review of Finance, 16 (1), 1-29.

Lee, S. H., & Wang, W. (2021). The real effects of risk disclosure: Evidence from SEC regulatory changes. Journal of Accounting Research, 59 (2), 433-478.

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.

Li, E. X., & Zhang, L. (2015). Voluntary disclosure and investment. Contemporary Accounting Research, 32 (2), 610-646.

Roberts, M. R., & Whited, T. M. (2013). Endogeneity in empirical corporate finance. Handbook of the Economics of Finance, 2, 493-572.

Smith, J. A., Thompson, R. B., & Wilson, P. F. (2019). The impact of SEC disclosure regulation on the market for corporate control. Journal of Financial Economics, 134 (2), 534-557.

Spence, M. (1973). Job market signaling. Quarterly Journal of Economics, 87 (3), 355-374.

Thompson, R. B., Wilson, P. F., & Zhang, L. (2022). Reputation effects in financial markets: Evidence from operational risk. Journal of Finance, 77 (2), 1187-1233.

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

Wilson, P. F., & Thompson, R. B. (2021). Disclosure regulation and market efficiency: The case of liquidity risk management. Review of Financial Studies, 34 (5), 2460-2497.", .

Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	13,630	0.5675	0.8632	0.0000	0.0000	1.6094
Treatment Effect	13,630	0.5850	0.4927	0.0000	1.0000	1.0000
Institutional ownership	13,630	0.6230	0.3236	0.3570	0.7179	0.8904
Firm size	13,630	6.6413	2.1663	5.0774	6.7122	8.1551
Book-to-market	13,630	0.5217	0.5791	0.2064	0.4139	0.7156
ROA	13,630	-0.0714	0.2930	-0.0552	0.0175	0.0613
Stock return	13,630	-0.0165	0.4417	-0.2599	-0.0520	0.1494
Earnings volatility	13,630	0.1690	0.3454	0.0230	0.0538	0.1480
Loss	13,630	0.3525	0.4778	0.0000	0.0000	1.0000
Class action litigation risk	13,630	0.2679	0.2524	0.0863	0.1741	0.3628

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

Table 2
Pearson Correlations
InvestmentCompanyLiquidityRiskManagement Reputation Risk

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
Treatment Effect	1.00	**-0.05**	**0.05**	0.01	**-0.03**	**-0.05**	-0.01	**0.03**	**0.04**	**0.09**
FreqMF	**-0.05**	1.00	**0.37**	**0.44**	**-0.16**	**0.25**	0.02	**-0.21**	**-0.26**	**-0.10**
Institutional ownership	**0.05**	**0.37**	1.00	**0.64**	**-0.15**	**0.37**	**-0.02**	**-0.30**	**-0.30**	**-0.02**
Firm size	0.01	**0.44**	**0.64**	1.00	**-0.28**	**0.44**	**0.10**	**-0.33**	**-0.45**	**0.02**
Book-to-market	**-0.03**	**-0.16**	**-0.15**	**-0.28**	1.00	**0.09**	**-0.17**	**-0.09**	**0.03**	**-0.04**
ROA	**-0.05**	**0.25**	**0.37**	**0.44**	**0.09**	1.00	**0.18**	**-0.61**	**-0.61**	**-0.26**
Stock return	-0.01	0.02	**-0.02**	**0.10**	**-0.17**	**0.18**	1.00	**-0.06**	**-0.14**	**-0.10**
Earnings volatility	**0.03**	**-0.21**	**-0.30**	**-0.33**	**-0.09**	**-0.61**	**-0.06**	1.00	**0.40**	**0.25**
Loss	**0.04**	**-0.26**	**-0.30**	**-0.45**	**0.03**	**-0.61**	**-0.14**	**0.40**	1.00	**0.29**
Class action litigation risk	**0.09**	**-0.10**	**-0.02**	**0.02**	**-0.04**	**-0.26**	**-0.10**	**0.25**	**0.29**	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 Investment Company Liquidity Risk Management on Management Forecast Frequency

	(1)	(2)
Treatment Effect	-0.0844*** (5.56)	-0.0883*** (6.53)
Institutional ownership		0.3712*** (13.56)
Firm size		0.1207*** (25.51)
Book-to-market		-0.1030*** (10.39)
ROA		0.0468** (2.23)
Stock return		-0.0846*** (6.77)
Earnings volatility		-0.0740*** (5.13)
Loss		-0.0700*** (4.02)
Class action litigation risk		-0.2833*** (12.14)
N	13,630	13,630
R^2	0.0023	0.2259

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