Information Acquisition By Mutual Fund Investors: Evidence from Stock Trading Suspensions†

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Abstract

We study the impact of liquidity on investors' information acquisition by examining frequent stock trading suspensions in China. Trading suspensions lead to stock illiquidity and significant mispricing of mutual funds, since the prices of fund shares are not adequately adjusted for valuation changes of the suspended holdings. We find that the liquidity created by mutual funds' demandable shares motivates investors to acquire firm-specific information about these illiquid holdings. This acquired information drives fund flows, as investors invest in underpriced funds. It is then reflected in stock prices at trading resumptions, suggesting that fund liquidity creation improves information about illiquid assets.

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Mutual funds, which hold over $60 trillion in global assets (ICI, 2023), have been increasingly investing in illiquid assets such as corporate debt, private equity, and real estate.[1] Through demandable shares issued by these funds, investors can adjust their investment at daily net asset values (NAVs). This mechanism provides a highly liquid avenue of investing in illiquid assets—which investors may otherwise avoid due to the difficulty of trading. In this paper, we study the impact of mutual funds' liquidity creation on investors' information choices. We show that investors acquire information on illiquid assets in fund portfolios, and their information is reflected in both fund flows and asset prices. Our findings suggest a liquidity channel whereby mutual funds enhance value-relevant information about illiquid assets.

The key empirical challenge in studying this channel is to isolate the *incremental liquidity* created by mutual funds, which varies with an asset's own liquidity and its exposure to mutual funds. We address this challenge using a setting based on frequent trading suspensions in the Chinese market. This setting provides a laboratory where many firms' stocks experience prolonged periods of perfect illiquidity. Hence, for suspended stocks, the incremental liquidity is captured by their exposures to mutual funds. These funds' shares are often mispriced because it is difficult to adequately adjust the values of suspended holdings for changes in their valuations. Investors may evaluate the sign and size of this mispricing, but to do so, they need firm-specific information. By examining investor activities during suspensions and subsequent stock price movements, we gain insights into how an illiquid asset's exposure to mutual funds affects information acquisition.

We develop a theoretical model of fund investors' information acquisition to guide our empirical analysis. Our model embeds a mutual fund into a rational expectations framework. In the model, a stock randomly becomes non-tradable after investors acquire information about its payoff. When investors cannot trade the stock, they can buy shares of the mutual

[1] For a partial list of recent research on open-end mutual funds' investment in illiquid asset classes, see Goldstein, Jiang, and Ng (2017), Jiang, Li, Sun, and Wang (2022), Kwon, Lowry, and Qian (2020), Chernenko, Lerner, and Zeng (2021), Couts, Gonçalves, and Rossi (2020), Couts (2022), Agarwal et al. (2023), and Agarwal et al. (2024).

fund, which holds the stock and as a result may be mispriced. Our model predicts a positive response of fund flows to the underpricing in fund shares. It also predicts that a larger weight of the stock in the fund's portfolio raises investors' ex-ante information acquisition and the informativeness of the stock's subsequent prices.

Several empirical facts suggest that our setting provides a useful laboratory for testing these predictions. First, when trading resumes, stock prices exhibit large positive or negative movements. A substantial fraction of these movements is firm-specific and can be predicted by ex-ante variables, including an AI signal extracted from firm announcements. Second, many mutual funds hold suspended stocks, some of them with significant portfolio weights. Third, funds generally fail to adequately adjust their NAVs for suspended holdings, leaving investors with opportunities to profit from mispriced fund shares.

Our analysis of a large sample of mutual funds provides evidence for investor response to the mispricing of fund shares due to illiquid holdings. Consistent with investors scrutinizing fund portfolios for profit opportunities, our data from an internet mutual fund forum reveal increased user posts about a fund's suspended holdings when these holdings have larger portfolio weights. We also find a strong and robust relationship between fund flows and NAV mispricing. Our estimates indicate that, controlling for fund performance, a one-percentage-point mispricing leads to flows amounting to 3%. This flow response only occurs for inflows and is stronger for fund shares owned by institutions. Overall, our findings suggest that fund investors act on information about suspended holdings.

While we control for a large set of fund-level variables, our estimation could still be biases by omitted fund characteristics. To address this concern, we exploit regulatory rules imposed on Chinese mutual funds that require six portfolio reports per year, with different timing and scope of disclosure. Thus, only a subset of a fund's holdings are observed by investors at any given point in time. Using the precise dates of disclosed holdings, we identify causal effects by comparing investor responses to suspended holdings that are observed and unobserved before trading resumes. Our comparison reveals significant differences between observed and unobserved holdings, which supports our interpretation that mispriced fund NAVs attract investor scrutiny and abnormal flows.

Next, we test our model prediction on information acquisition about suspended stocks. We use two measures of investors' information acquisition activities. The first measure is corporate visits by financial institutions during a stock's suspension period. This measure, based on Chinese public firms' mandatory disclosures of private meetings with investors, captures the acquisition of private information. The second measure of information acquisition is the intensity of internet searches, which captures investor demand for firm-specific public information. Our empirical strategy compares suspension events by their exposures to mutual funds, proxied by the stock's maximum portfolio weight among all funds, while controlling for the stock's overall mutual fund ownership as well as other firm and event-specific characteristics.

Using these two measures, we find that a suspended stock's exposure to mutual funds has a sizable positive impact on investors' information acquisition activities. Our estimates show that, increasing the stock's exposure to mutual funds by 10% attracts 2.2 more institutions to visit the firm during suspensions. Nearly half of the visitors are private funds (e.g., hedge funds), which potentially invest via mutual fund shares. We find a similar positive effect on internet searches. These findings suggest that the exposure to mutual funds induces an increase in investors' acquisition of both private and public information.

Finally, our model predicts that when trading resumes, the incremental information acquired by fund investors will be incorporated into stock prices and make them more informative about fundamentals. We test this prediction using a theory-motivated measure of price informativeness: the magnitude of price movements at resumptions. We find that a stock's exposure to mutual funds during the suspension period leads to significantly larger price movements when its trading resumes, suggesting that more information is incorporated into prices. Moreover, we find that the exposure to mutual funds is also associated with a higher sensitivity between price movements at the resumption and the firm's future earnings surprises. These findings provide further evidence for fund investors' information acquisition.

This paper sheds light on a liquidity channel through which mutual funds affect investor information choices in capital markets. A large theoretical literature models asset managers as delegated information acquirers (e.g., Garcia and Vanden, 2009; Kacperczyk, Van Nieuwerburgh, and Veldkamp, 2016; Gârleanu and Pedersen, 2018). Consistent with this view, the empirical literature has examined portfolio managers' informed investments (e.g., Coval and Moskowitz, 1999, 2001; Cohen, Frazzini, and Malloy, 2008) and investors' reactions to fund performance (e.g., Chevalier and Ellison, 1997; Sirri and Tufano, 1998). Our study differs from these studies, as it shows that the liquidity created by mutual funds influences investors' own information acquisition activities as well as their money flows.

Our insight is related to three papers on flow response to fund holdings. Among them, Solomon, Soltes, and Sosyura (2014) show that media coverage of stock holdings attracts return-chasing flows, Gallagher, Schmidt, Timmermann, and Wermers (2018) document outflows from money market funds exposed to the Eurozone crisis, and Di Maggio, Franzoni, Kogan, and Xing (2023) argue that funds avoid stocks with extreme returns, as holding such stocks leads to outflows. We complement these studies by examining informed flows when investors actively acquire information on illiquid assets in fund portfolios.

The mechanism of open-end funds has inspired a growing literature on liquidity transformation by nonbank financial intermediaries (Chernenko and Sunderam, 2016; Ma, Xiao, and Zeng, 2022). This literature focuses on liquidity mismatches in funds with illiquid portfolios and the resulting fund fragility (e.g., Goldstein, Jiang, and Ng, 2017). While our paper examines occasional illiquidity events, our finding that investors acquire information about specific holdings suggests that in addition to liquidity mismatches, the transparency of fund portfolios also plays a role in fund fragility.

This paper also extends the literature on stale fund net asset values. In existing studies, stale values arising from regional time differences (e.g., Zitzewitz, 2003, 2006; Chalmers, Edelen, and Kadlec, 2001) or illiquid bond portfolios (e.g., Choi, Kronlund, and Oh, 2019; Zhang, Kuong, and O'Donovan, 2023) can be exploited by investors without analyzing specific holdings. In our setting, by contrast, investors need firm-specific information to exploit the stale net asset values. Moreover, our paper extends the literature on stock trading suspensions. Prior studies of this regulatory rule (e.g., Kryzanowski, 1979; Howe and Schlarbaum, 1986; Bhattacharya and Spiegel, 1998; Huang, Shi, Song, and Zhao, 2018) generally focus on its impact on stock trading and returns. Our study adds a new perspective on how this rule affects fund investors and fund flows in modern financial markets.

The rest of this paper proceeds as follows. Section 1 develops a stylized model to formalize intuition and derive predictions. Section 2 introduces our empirical setting and data. Section 3 presents stylized empirical facts. We then explain our empirical methodologies for testing model predictions and discuss our results in Sections 4–5. Finally, Section 6 concludes.

1. Theoretical Framework

This section develops a simple model of fund investors' information acquisition. Our model endogenizes information acquisition and price informativeness in a rational expectations equilibrium (Grossman and Stiglitz, 1980). Specifically, we construct a partially-revealing equilibrium where asset prices, set by competitive market makers (Kyle 1985), aggregate noisy private signals (Hellwig, 1980). The precision of these signals is chosen by investors as in Verrecchia (1982). We depart from classic models by introducing occasional illiquidity events and by analyzing the impact of liquidity provided by mutual funds.

1.1. Setup

There are three time periods, $t = 0, 1, 2$, and a continuum of price-taking investors, indexed by $i \in [0, 1]$. Each investor has initial wealth W_0 and negative exponential utility $u(W_i) = -e^{-\rho W_i}$ over wealth W_i at $t = 2$. They can always lend and borrow at a zero risk-free rate. There is a risky asset that pays v at $t = 2$. The payoff v is normally distributed with mean v_0 and variance τ_v^{-1}. This asset is potentially illiquid: Investors can trade it at $t = 1$ if its market is open, which occurs exogenously with probability $q \in (0, 1]$. With probability $1 - q$, its trading is suspended, and the asset is completely non-tradable. We denote the tradable and non-tradable states at $t = 1$ with $M \in \{1, 0\}$.

Open-end fund. There exists a mutual fund whose portfolio consists of the asset that will pay v and some other risky assets. The value of fund shares at $t = 2$ will be $v_f = \theta v + (1-\theta)\omega$, where $\theta \in (0, 1)$ is the weight of the risky asset under consideration, and $\omega \sim N(0, \tau_\omega^{-1})$ is an unhedgeable payoff generated by other assets in the portfolio.[2] At $t = 1$, investors may purchase or redeem the fund's shares at a fixed share net asset value (NAV). This NAV depends on the potentially illiquid underlying asset. If the asset is tradable at $t = 1$, the NAV is $p_f = \theta p$. In contrast, if the asset is non-tradable, the NAV will be set at the unconditional expected share value, i.e., $p_f = \theta v_0$.

Information structure. In period $t = 1$, each investor i privately observes a noisy signal about v: $s_i = v + \tau_s^{-1/2} \epsilon_i$, where ϵ_i is standard normal and independent across investors. At $t = 0$, investor i chooses private information about v before knowing the realizations of M and s_i: The investor chooses a signal precision τ_s by incurring a non-pecuniary cost $c(\tau_s)$, where c is continuously differentiable, strictly increasing, strictly convex and satisfies $c'(0) = 0$. Random variables $v, \omega, u, \epsilon_i, M$ are mutually independent. Investor preferences, market structure, and all distributions are common knowledge among market participants.

[2]For simplicity, our model abstracts away the dilution or concentration effects of flows on the value of fund shares because the size of informed flows is small relative to the fund's size.

Trading. If the market for the risky asset is open at $t = 1$, each investor chooses a demand schedule $x_i(s_i, p)$ that buys x_i shares of the risky asset at price p. Meanwhile, a unit mass of noise traders submit net demand $u \sim N(0, \tau_u^{-1})$. A competitive fringe of risk-neutral market makers observe aggregate demand schedule $X(p) = \int_0^1 x_i(s_i, p)\,\mathrm{d}i + u$ and set price as $p = \mathbb{E}[v|X(\cdot)]$. We assume that θ is relatively small, hence whenever possible, investors will directly trade the risky asset. If the trading of the asset is suspended at $t = 1$, then each investor can choose to hold y_i units of fund shares.

Equilibrium. We focus on a symmetric linear equilibrium, characterized by (i) an asset demand schedule $x(s_i, p)$ that, given p, maximizes investor i's $t = 1$ expected utility $V(s_i, p) = \max_{x_i} \mathbb{E}[u(W_i)|s_i, p, M = 1]$ when the market is open, (ii) a fund share demand schedule $y(s_i)$ that maximizes investor i's $t = 1$ expected utility $V_f(s_i) = \max_{y_i} \mathbb{E}[u(W_i)|s_i, M = 0]$ from investing through the fund, (iii) an information choice τ_s that maximizes investor ex-ante expected utility $\Pi(\tau_s) = q\mathbb{E}[V(s_i, p)] + (1 - q)\mathbb{E}[V_f(s_i)] - c(\tau_s)$, and (iv) a price function

$$p = p_0 + \gamma(v - v_0) + \lambda u, \tag{1}$$

where p_0, γ, λ are endogenous coefficients determined by Bertrand competition among risk-neutral market makers. We define price informativeness as $\Phi = Var[v|p]^{-1} - \tau_v$, which is the amount of information about v that can be inferred from price p.

1.2. NAV Mispricing and Fund Flows

To analyze the mispriced fund NAVs when the underlying asset is non-tradable, we begin with the equilibrium price p set by market makers when the asset is tradable at $t = 1$.

Lemma 1. *For any given τ_s, there exists a unique linear asset market equilibrium at $t = 1$: if the market opens, investor i submits demand*

$$x(s_i, p) = \frac{\tau_s}{\rho}(s_i - p), \tag{2}$$

the informativeness of price p is $\Phi = \frac{\tau_s^2 \tau_u}{\rho^2}$, and the magnitude of price movement at $t = 1$ satisfies

$$Var[p - v_0] = \frac{1}{\tau_v} - \frac{1}{\Phi + \tau_v}. \tag{3}$$

Equation (2) shows that investor demand for the risky asset only depends on the difference between the realized signal s_i and the price p. Intuitively, investors trade on private signals more aggressively if their signals are more precise. As a result, the equilibrium price will be more informative about v (i.e., Φ will be greater) if investors receive more precise signals. Equation (3) links two endogenous variables, showing that the magnitude of the price movement at $t = 1$ is strictly increasing in Φ. We will develop an empirical measure of price informativeness based on this linktage.

It is worth noting that if the underlying asset is non-tradable at $t = 1$, the fund shares are mispriced by $\theta(p - v_0)$, where p is the fair value of the illiquid asset, namely, the market price if it were normally traded. Our first proposition describes how this NAV mispricing is related to investors' choices of investing in fund shares.

Proposition 1. *When the underlying asset is non-tradable, investment in the fund is positively correlated with the mispricing of the fund NAV: $Cov[\int_0^1 y_i \, \mathrm{d}i, \theta(p - v_0)] > 0$.*

The investor's demand for fund shares y_i and asset trading choice x_i are commonly driven by the investor's private signal s_i. Since s_i is an unbiased signal of the asset's payoff v, overall investors will purchase more fund shares when v is greater and vice versa. When v is greater, if the asset is tradable, its price p also tends to be higher, and hence if the asset is non-tradable, fund shares tend to be more undervalued. As such, there is a positive association between fund share undervaluation and informed investment in fund shares.

1.3. Fund Portfolio Weight and Investor Information Choices

When choosing information in period $t = 0$, investors face a tradeoff between the value of private signals and the cost of signal precision. Private information is less valuable if price p, a public signal, is more informative about payoff v. So investors will choose a lower signal precision if they anticipate a more informative price when the asset is tradable at $t = 1$. Meanwhile, because investors can invest via fund shares at a fixed NAV when the underlying asset is non-tradable, the value of private information also depends on the asset's exposure to the fund. In particular, when portfolio weight θ is greater, investors get less unwanted exposure to risks due to other assets in the fund portfolio, which allows them to make larger informed bets at a given level of risk.

The informativeness of price p and the asset's weight in fund portfolio θ jointly determine the marginal value of information. The investor's optimal information choice at $t = 0$ equalizes this marginal value and the marginal cost and in turn, affects price informativeness at $t = 1$. In equilibrium, the signal precision at $t = 0$ results in a price informativeness at which every investor's choice is indeed optimal. The lemma below characterizes this equilibrium.

Lemma 2. *There exists a unique equilibrium at $t = 0$. The investor's optimal information choice τ_s is characterized by*

$$q \cdot \psi(\tau_s) + (1 - q)\varphi(\tau_s, \theta) = c'(\tau_s), \tag{4}$$

where $\psi : \mathbb{R}_+ \mapsto \mathbb{R}_{++}$ and $\varphi : \mathbb{R}_+ \times (0, 1) \mapsto \mathbb{R}_{++}$ are both continuously differentiable and strictly decreasing in τ_s, and φ is strictly increasing in θ.

Lemma 2 provides comparative statics with respect to θ. On the one hand, a greater θ raises φ due to the opportunity of investing via fund shares when the underlying asset is non-tradable. On the other hand, φ is still decreasing in τ_s due to investors' aversion to residual uncertainty in the value of fund shares. Given that the left hand side of (4) decreases in τ_s and that c' is strictly increasing, the equation implies that equilibrium signal precision is increasing in θ. This in turn leads to a more informative asset price when trading occurs.

Proposition 2. *In equilibrium, the signal precision τ_s and the price informativeness Φ are both increasing in θ.*

Proposition 2 shows that when the risky asset has a greater weight in the fund portfolio, investors will acquire more information. Moreover, when the asset turns out tradable at $t = 1$, its price will be more informative as investors will trade on more precise signals.

1.4. Testable Predictions

Our model yields two empirical predictions:

Prediction 1. *At the fund level, flows positively respond to the underpricing of fund NAVs caused by illiquid portfolio holdings.*

Prediction 2. *At the asset level, an illiquid asset's exposure to mutual funds increases investor information acquisition and price informativeness.*

2. Empirical Setting

We use the Chinese market as an empirical setting to test our predictions. This setting has several features. First, many firms experience prolonged periods of trading suspensions, during which their stocks become perfectly illiquid. Second, suspended stocks may be held by mutual funds with significant portfolio weights, which generates mispricing in fund NAVs. Third, stock prices exhibit large movements at trading resumptions, reflecting information accumulated during suspensions. Finally, for institutional reasons, a stock's exposure to mutual funds is better observed by researchers than by investors, which helps disentangle different explanations.

2.1. Institutional Background

Trading Suspensions. For many years, trading suspensions have been a regular phenomenon in the Chinese stock market. The two exchanges, the Shanghai Stock Exchange (SSE) and the Shenzhen Stock Exchange (SZSE), both require publicly listed firms to suspend trading before major corporate events (e.g., acquisitions/sales of assets, mergers, and restructurings).[3] At the planning stage of these events, firms must apply to the exchange for a trading suspension. When suspended, firms have to announce the progress of their events and the planned dates of trading resumptions. The suspension period is, in principle, limited to no longer than three months.[4]

In practice, the suspension rules were not subject to stringent regulatory oversight or legal enforcement. As a result, many firms suspend for periods exceeding three months or even multiple years. This causes a significant fraction of publicly listed firms to be not traded for prolonged periods of time. Between 2004–2020, 78.5% of stocks listed on the two exchanges were suspended at least once, and in total, 4.6% of stock-trading day pairs were in suspension. Since these stocks cannot be traded during suspensions, the liquidity of the stocks is completely eliminated.[5]

Figure 1 summarizes suspension events. The annual event count typically falls between 500 and 2,000, with considerable variation across years and a particularly high frequency in 2006 and 2015. On average, suspensions last between 20 and 40 trading days. Such prevalent suspensions did not receive much regulatory intervention until November 2018, when the China Securities Regulatory Commission (CSRC) implemented new guidelines to limit the scope and length of stock trading suspensions. After 2018, suspension events became less

[3] For example, both exchanges released guidance on stock trading suspension in their 2012 rules about the supervision of corporate reorganizations.

[4] See Huang, Shi, Song, and Zhao (2018) for a more detailed discussion on trading suspension rules.

[5] Chinese stocks do not trade in non-exchange venues such as over-the-counter (OTC) and alternative trading system (ATS) markets, and the two stock exchanges do not allow off-exchange block trades during the trading suspension period. Single-name equity derivatives are very limited during our sample period.

frequent and shorter in duration.

Mutual Funds. According to the Asset Management Association of China, there were 6,770 open-end mutual funds by December 2020. Among them, 1,362 are equity funds and 3,195 are mixed funds, with 2.06 and 4.36 trillion CNY total net assets (approximately 317 and 670 billion USD), respectively. In China, retail investors and non-financial entities (corporations, organizations, and government agencies) are the main shareholders of public firms. Despite years of growth, the share of stocks held by Chinese mutual funds decreased since its historical peak of 25% in 2007. In 2020, mutual funds held only 7.3% of the 64.2 trillion CNY (9.9 trillion USD) total market capitalization of tradable shares.

Since 2004, the CSRC has required mutual funds to publicly disclose portfolio holdings. Regulatory rules mandate six filings per year, including four quarterly reports, one semiannual report, and one annual report. Mutual funds must file the quarterly reports within 15 business days after the end of the most recent quarter. These reports disclose only the top-ten stock holdings in the fund portfolios. By contrast, complete portfolio snapshots as of the end of June and December are disclosed in the semiannual and annual reports. These semiannual and annual reports must be filed within 60 and 90 calendar days, respectively.

The CSRC requires mutual funds to hold no more than 10% of portfolio weight in any single stock. When a stock is suspended from trading, the stock's price becomes stale. To determine the valuations of suspended stocks in mutual fund portfolios, the CSRC suggested several methods, such as adjusting prices based on market returns. However, whether fund share prices accurately reflect stock fair values is an empirical question.

2.2. Data

Our study relies on several data sources. We use the China Stock Market & Accounting Research (CSMAR) database as the primary data source for stocks, public firms, and mutual funds. We collect thread posts on EastMoney's fund section, an online forum where Chinese investors discuss mutual funds. We also obtain data on corporate visits by financial institutions and internet searches of individual stocks.

We begin with all 4,365 A-Share stocks ever listed on the main board of the SSE and the main board, the Growth Enterprise Market (GEM) board, and the Small/Medium Enterprise (SME) board of the SZSE between 2004–2020. We select stock trading suspension events between 2004–2020 that last for multiple trading days. There are 16,958 events. The duration of suspensions ranges between two and 1,679 trading days, with an average of 28.0 and a standard deviation of 59.5 trading days. We also extract the content of public announcements made during the suspension period and use OpenAI's GPT–3.5–turbo Large Language Model to process the textual information.

We use data on open-end mutual funds that ever existed between 2004–2020 from CSMAR. Our sample includes equity, bond, and mixed funds (CategoryID="S0601","S0602", or "S0604") and excludes money market funds, exchange-traded funds, funds of funds, listed open-end funds, and structured funds.[6] This filter yields 2,881 funds. Our fund stock holdings data include top-ten holdings from quarterly reports and complete portfolio holdings from semiannual and annual reports. We obtain the number of shares and the weight of a stock in a fund's portfolio, as well as the precise date when the stock holding is disclosed to investors. After restricting our sample to fund-stock pairs between 2004–2020, there are 0.43 million and 1.14 million records of top-ten and non-top-ten stock holdings, respectively.

Our data from EastMoney's mutual fund section consist of detailed information extracted from user thread posts. Every post is associated with a unique fund identifier that can be linked to the fund in CSMAR. This feature allows us to measure investor attention on suspended fund stock holdings. Specifically, we identify a post as related to suspended

[6]We exclude ETFs because data on their portfolio holdings are unavailable, and their share prices often exhibit large deviations from NAVs. Listed open-end funds are open-end funds whose shares are traded on exchanges. Structured funds are leveraged funds that issue both risky and safe share classes.

portfolio holdings based on the title and content of the post.[7] In total, users made 6,767 such posts about 1,378 funds between July 2017 and December 2020. These posts were read 15.4 million times, liked 13,915 times, and received 8,583 user replies. Each post also includes a score for the author's community impact, which ranges between one and ten.

Our setting offers a unique measure of financial institutions' acquisition of private information. Since 2006, the SZSE implemented the CSRC's Fair Disclosure regulation and mandates that firms publicly disclose their private meetings with investors.[8] Using this data source, we observe 128,219 private meetings between 2012–2020, involving 1.03 million institutional visitors. We classify a visitor institution as a "private fund" if it is an asset manager that does not manage mutual funds, venture capital, or insurance assets. We also obtain data on firm-level internet searches to measure investors' acquisition of public information (Drake, Roulstone, and Thornock, 2012; Kong, Lin, and Liu, 2019). We focus on searches through Baidu, the dominant search engine in the Chinese market.This dataset, collected from the Baidu Index Platform, provides weekly indexes that capture the intensity of user searches from computers (PCs) between 2006–2020 and mobile devices between 2011–2020.

We measure earnings surprises using quarterly earnings per share (EPS) and apply a seasonal random-walk model that is standard in the accounting literature (Bernard and Thomas, 1990).[9] Specifically, we compute unexpected earnings (UE_t) as the difference between the quarter's actual EPS and the EPS of the same quarter in the previous year. We then compute standardized unexpected earnings (SUE_t), which are UE_t scaled by their standard deviation over the past four to eight quarters.

[7]We use keywords "suspend", "resume", "suspension", and "resumption" to filter for posts related to suspended fund portfolio holdings.

[8]This data source has been used to measure information acquisition activities in prior literature, e.g., Cheng, Du, Wang, and Wang (2016), Chen, Qu, Shen, Wang, and Xu (2022)

[9]In China, analysts generally do not provide forecasts for quarterly earnings. The literature shows that earnings expectations of investors who lack access to analyst forecasts resemble the seasonal random-walk model (Bhattacharya, 2001; Battalio and Mendenhall, 2005; Ayers, Li, and Yeung, 2011)

2.3. Measuring Returns

We define *ResmRet* as the raw stock return that is realized at the end of a suspension event. A caveat is that some stocks face a 10% daily price limit, which constrains the immediate price movements on resumption days.[10] We carefully track the number of consecutive trading days that a stock's price hits daily price limits after resumption. Figure IA.1 in the Internet Appendix summarizes this number. While the CSRC exempts price limits on the first trading day for suspensions related to some corporate events, prices in about 45% of the events still hit the limit on the day of resumption. For these events, we set *ResmRet* to be the cumulative return from the beginning of the resumption day to the end of the day the stock stops hitting price limits, which we refer to as the "release day".

To capture firm-specific price movements at resumptions, we compute abnormal returns with a market model, using the Shanghai-Shenzhen A-Share Index return (MarketType ="53") as the market return and the one-year bank deposit rate as the risk-free rate. We first estimate the stock's beta with 250 daily returns before a suspension event. We then match each event with market return, $MktRet$, and risk-free return, Rf, between the suspension day and the resumption day (release day, if price limit is hit) and define the event's abnormal return at resumption as $ResmAR = (ResmRet - Rf) - \beta(MktRet - Rf)$.

For mutual funds, we carefully adjust daily NAVs for dividend payouts and share splits before computing daily raw NAV returns. Similar to stocks, we compute daily NAV abnormal returns using 250 daily returns. Since our fund sample includes mixed funds, we estimate fund betas with a two-factor model, using the Shanghai-Shenzhen A-Share Index and Shanghai Corporate Bond Index as stock and bond market returns, respectively.

[10]For for stocks with a special treatment ("ST") status, the daily price limit is 5%.

2.4. Summary Statistics

Table 1 reports summary statistics for variables in our main empirical tests. Panel A presents summary statistics for our fund-day level sample of investor activities in the internet mutual fund forum. Panel B presents summary statistics for our fund-quarter level sample for flow reponse. Panel C presents summary statistics for the suspension event-level sample. We further describe these variables in later sections.

3. Stylized Facts

In this section, we establish several empirical facts that serve as the foundation for testing our model's predictions.

3.1. Stock Price Movements at Resumption

When trading is suspended, new information cannot be incorporated into stock prices. Once trading resumes, the accumulated information will be reflected, giving rise to large stock price movements. Figure 2 summarizes these price movements. Panel (a) reports the distribution of *ResmRet*, which is largely symmetrically distributed around zero and highly volatile, exhibiting fat tails: 785 (3,454) suspension events end up with returns whose magnitude exceed 50% (20%). Panel (b) replaces the variable with *ResmAR*, which is adjusted for market returns during the suspension period. The distribution remains similar. Indeed, the two return measures have standard deviations 48% and 42%, respectively, which implies that stock price movements at resumptions are primarily driven by firm-specific information.[11]

[11]The returns in Figure 2 are winsorized, resulting in a disproportionate mass at the ends of the distributions.

3.2. Predictability of Stock Price Movements

Stock price movements at resumptions can be predicted by variables observed before the resumption. To illustrate this, we estimate regressions of $ResmRet$ on $MkrRet$ and firm-specific news measured during suspensions. Table 2 reports our estimation results. Column (1) shows that the market return during the suspension period predicts the resumption return with a 34% R^2. To investigate whether the length of the suspension is related to the resumption return, we include the logarithm of the number of suspension days as an additional explanatory variable. We find that the resumption return increases with the length of the suspension, as shown in column (2). In column (3), we add the firm's earnings surprises announced during the suspension period, which capture firm-specific news and also positively predict $ResmRet$.

During the suspension period, an important source of firm-specific information is the firm's public announcements. We collect and use AI to process the content of these announcements, converting the textual information to a trading signal taking a value of -1, 0, or 1.[12] In column (4), we find that this signal positively predicts a 6.0 percentage point difference in resumption return. The R^2 of this regression is a modest 0.3%, suggesting that our AI model's ability to extract information from announcements is limited. After including market returns in column (5), the predictive power of our AI signal remains sizable and significant.

3.3. Suspended Stocks in Fund Portfolios

For mutual fund investors to profit from suspended stocks' predictable price movements, there are three necessary conditions. First, the weight of suspended stocks in fund portfolios should be sizable. Second, investors should be able to observe suspended holdings before their trading resumes. Third, NAVs at which investors purchase and redeem fund shares should be mispriced due to the stale prices of suspended holdings.

[12] We explain this step in detail in Section IA.2 of the Internet Appendix.

Figure 3 presents fund portfolio weights of suspended stocks, measured at the quarter-end before resumption. Since small positions are unlikely relevant, we exclude holdings with portfolio weights below 1%. We divide suspended holdings into two groups, depending on whether the holdings are disclosed, and thus observed by investors, before trading resumes. There are 6,518 cases with observed and 9,547 cases with unobserved holdings records. Many holdings have substantial portfolio weights. The median weight is 3.4% (2.3%) for observed (unobserved) holdings. On the right tail, more than 10% of observed (unobserved) holdings have weights exceeding 6.0% (5.4%). These large portfolio weights provide meaningful exposures to the suspended stocks.

To investigate whether mutual funds accurately price NAVs based on the fair values of suspended holdings, we calculate two returns at resumptions: fund NAV returns, and suspended holdings' weight-implied NAV returns, i.e., the product of portfolio weight and *ResmRet*.[13] If funds accurately adjust NAVs before resumptions, these two returns should be uncorrelated, as any information during suspensions would be already reflected in NAVs. In sharp contrast, Figure 4 presents a strong positive correlation between these two returns, with a slope very close to one. This implies that overall, funds fail to adjust for stale stock prices. Internet Appendix IA.3 provides further evidence that even when funds adjust the valuation of suspended holdings, their adjustment reflects only market returns. Therefore, investors may potentially profit by exploiting mispriced NAVs.

4. Flow Response to Mispricing in Illiquid Holdings

In this section, we test our model's Prediction 1 within the empirical setting introduced in the last section. We do this by constructing fund-level samples and estimating how investors respond to suspended holdings.

[13]For example, if the portfolio weight of a suspended stock is 5%, and its *ResmRet* is 20%, then the weight-implied NAV return is $5\% \times 20\% = 1\%$. NAV returns are measured over the same time window of *ResmRet*.

4.1. Methodology

Our fund-level analysis consists of two steps. In the first step, we seek to understand whether investors scrutinize suspended holdings, a necessary condition for the existence of any flow response. We test this in a fund–day panel sample. Specifically, we regress fund-level measures of investor posts in the internet mutual fund forum on the weight of suspended stocks in the fund's portfolio:

$$Posts_{f,t} = \beta SuspWgt_{f,t} + \delta_f + \delta_t + \epsilon_{f,t}. \tag{5}$$

$SuspWgt_{f,t}$ is fund f's total suspended portfolio weight on calendar day t. We estimate β using within-fund variation in $SuspWgt_{f,t}$ and include year-date fixed effects to account for changes in overall suspensions and forum posts over time.

The second step of our analysis investigates how fund flows respond to mispriced NAVs caused by suspended holdings. As standard in the literature, we calculate net flows into a fund as

$$Flow_{f,t} = \frac{TNA_{f,t} - TNA_{f,t-1} \times (1 + r_{f,t})}{TNA_{f,t-1} \times (1 + r_{f,t})}, \tag{6}$$

where $TNA_{f,t}$ is the total net assets of fund f at the end of quarter t, and $r_{f,t}$ is the fund's return over quarter t. To mitigate the influence of outliers, we winsorize the flows at the 2.5 and the 97.5 percentiles. We estimate a flow regression using a fund-quarter panel sample:

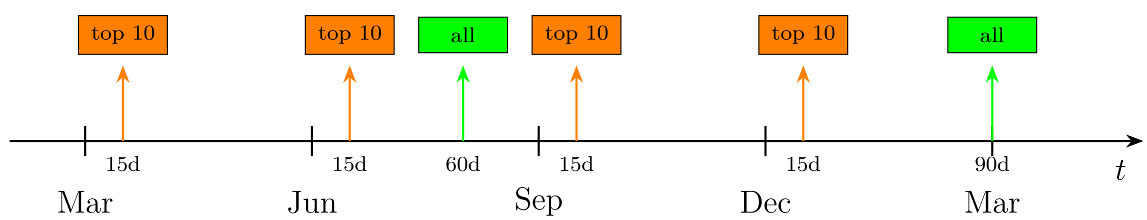
$$Flow_{f,t} = \beta Mispricing_{f,t} + \Gamma' Control_{f,t} + \delta_t + \epsilon_{f,t}, \tag{7}$$

where $Mispricing_{f,t}$ is fund f's NAV mispricing in quarter t. We calculate NAV mispricing as the product of a suspended stock's portfolio weight in fund f in quarter t and its price movement at resumption ($ResmRet$ or $ResmAR$) in quarter $t+1$. Hence, this measure uses stock returns realized at resumptions as a proxy for the mispricing of a suspended holding.[14] If more than one suspended holding will resume trading in the next quarter, we aggregate

[14] To ensure that the flows are driven by information before the resumptions, we construct this sample using only events for which the suspension and resumption dates are in different quarters.

the mispricing to the fund level. Our specifications control for lagged fund performance, measured as quarterly abnormal NAV returns, as well as other fund-level and fund family-level characteristics. We also include quarter fixed effects, thereby estimating β using variation in NAV mispricing across funds within the same quarter.

A natural concern for regressions (5) and (7) is that the outcome variables and suspended holdings could be both driven by omitted fund characteristics, which generate a spurious relationship between them. To addresses this concern, our empirical strategy compares suspended holdings that are observed and unobserved by investors before their trading resumes. As introduced in Section 2 and illustrated in the timeline below, each fund discloses six portfolio reports per year, with different timing and scope of disclosure. Thus, only a subset of a fund's holdings are observed by investors at any point in time. Our strategy helps disentangle investor response from spurious relationships because if our estimation is biased by omitted fund characteristics, such bias would likely generate similar spurious "response" to unobserved holdings as well.



It is worth noting that our strategy requires sufficient variation in unobserved suspended holdings for statistical power. First, Figure 3 shows that many unobserved holdings have large fund portfolio weights. Second, observed and unobserved suspended holdings have similar impacts on fund NAVs at trading resumptions, which is shown in Figure IA.2 in the Internet Appendix. Hence, a test on the difference between the two β estimates can detect investor response to mispriced NAVs due to observed suspended holdings.

To implement our strategy, we use the precise date of each fund portfolio report to track suspended holdings that are already disclosed and not yet disclosed, for any fund on any date. Details of this step can be found in Internet Appendix Section IA.4. We then calculate fund suspended weights, $SuspWgt$, that are observed and unobserved by investors on each day in our fund-day panel. Similarly, we calculate two versions of NAV mispricing based on suspended holdings that are observed and unobserved by investors at the end of the quarter of flow measurement.

4.2. Investors' Scrutiny of Suspended Holdings

Panel A of Table 1 shows that suspended fund portfolio weights are often substantial. There are large numbers of days when the fund has a sizable $SuspWgt$, for holdings that observed and unobserved by investors on the day. Thread posts about suspended holdings are much less frequent: After all, many investors do not use this forum, and only some of the users would make posts on a day.

Table 3 reports our estimation results of equation (5). In Panel A, we use the continuous $SuspWgt$ for observed and unobserved holdings as the independent variables. The point estimate in column (1) indicates that, every one percentage-point increase in the observed suspended portfolio weight is associated with a 0.032 standard deviation increase in daily posts about a fund's suspended holdings (i.e., $0.139 \times 0.01/0.043$). Columns (2)–(4) use the number of user replies, the impact score, and the number of likes as the dependent variables, and get qualitatively similar estimates. In contrast, the coefficients on the unobserved suspended portfolio weights are statistically indistinguishable from zero. Our F-tests in the last row largely reject the null hypothesis that the coefficients on observed and unobserved suspended weights are identical.

Panel B further quantifies investor activities by replacing the continuous $SuspWgt$ with indicator variables indicating whether the suspended portfolio weight is below 5%, between 5%–10%, and above 10%. The magnitude of effects increases monotonically in the observed suspended weights. For fund–day pairs with observed suspended weights exceeding 10%, the new posts are about 20 times as frequent as pairs where the weights are less than 5%. On average, these posts receive 23 times more replies, are written by posters with 20 times higher impact scores, and obtain nine times more like clicks. No effect was found for indicator variables corresponding to unobserved holdings. Taken together, these results indicate that investors do scrutinize suspended stocks held by mutual funds based on currently disclosed portfolio snapshots.

4.3. Fund Flows Respond to Mispriced NAVs

Our sample for testing flow response includes all fund-quarters, regardless of whether the fund has suspended holdings. As a result, in Panel B of Table 1, NAV misprising is significant among a relatively small fraction of observations. The average fund is 5.7 years old and CNY 2 billion in size and delivers a positive 1% abnormal quarterly return. These funds generally charge no purchase fees, but some of them charge redemption fees.

Table 4 reports our estimation results of flow response in equation (7). In column (1), our estimate for the coefficient of NAV mispricing, as observed by investors, is positive and statistically significant. This point estimate indicates that, controlling for fund performance, a one-percentage-point NAV underpricing for observed holdings attracts 1.72% larger money flows into the fund. In contrast, the estimate for the coefficient on unobserved NAV mispricing is negative and statistically insignificant. In column (2), these estimates remain similar after adding control variables at the fund and fund family levels. In columns (3)-(4), we measure NAV mispricing based on the abnormal resumption return *ResmAR*, instead of the raw resumption return *ResmRet*. We find qualitatively similar estimates with a larger magnitude using abnormal returns. Across the specifications, our F-tests reject the null hypothesis $\beta^{obs} = \beta^{ubs}$. This further supports our interpretation that fund flows respond to investors' information about suspended stocks in observed fund portfolios.

While all investors can purchase mutual fund shares, only existing investors of a fund can redeem shares. This short-sale constraint implies that flows may respond asymmetrically to positive and negative information during suspensions. We explore this potential asymmetry by replacing the investor-observed NAV mispricing with piecewise-linear variables, defined as $Underpricing = \max\{Mispricing, 0\}$ and $Overpricing = \min\{Mispricing, 0\}$, respectively. Table 5 reports our results of estimating such piecewise-linear specifications. Across all specifications, the estimates for the coefficient on $Underpricing$ are larger than those for $Mispricing$ in Table 4 and statistically significant. The point estimate in column (4) indicates that a one-percentage-point NAV underpricing leads to 3.1% of inflows. In contrast, the coefficients on $Overpricing$ are close to zero and insignificant. This evidence suggests that flow response is indeed asymmetric, with primarily inflows responding to positive information on suspended holdings.

Next, we explore the response to mispricing in fund NAVs for different types of fund investors. We do so by regressing the proportional change in the number of shares owned by institutional investors, retail investors, and fund company insiders separately on our measure of NAV mispricing. Because these numbers are reported only in semiannual and annual fund reports, we construct measures at a semiannual frequency and estimate regressions in fund-semiannual panel samples. Table 6 reports our estimation results. In the first row of this table, mispricing is calculated based on all suspension events. Our estimates indicate that an 1% NAV underpricing is associated with an 1.51% increase in shares owned by institutional investors. In contrast, the corresponding change in shares owned by retail investors is a modest 0.25%. We do not find any impact for insiders.

In the second and third rows, we use suspension events that last for at least 10 or 100 trading days, respectively, to calculate NAV mispricing. The estimated increases in shares owned by both institutional and retail investors increase at longer horizons, implying that long-lasting events attract larger investor responses. Overall, our findings suggest that institutional investors are the most responsive to NAV mispricing, followed by retail investors.

Interestingly, we even find an increase in fund ownership for fund insiders at the 100 trading day horizon.[15]

5. Information Acquisition and Price Informativeness

The previous section does not distinguish the source of the information that drives flow response. In this section, we test whether investors actively acquire information by testing our model's Prediction 2. Specifically, we construct an event-level sample and estimate how a suspended stock's exposure to mutual funds affects the information acquisition by investors during suspensions and the stock price informativeness at resumptions.

5.1. Methodology

We use two measures of investor information acquisition. First, we measure the acquisition of private information about a firm based on financial institutions' corporate visits during the suspension period. Second, we measure overall investors' acquisition of public information with internet searches during the suspension period.[16] These two measures offer complementary insights into investors' demand for firm-specific information.

To test the impact of the liquidity creation by mutual funds on investor information acquisition, we estimate regression

$$InfoAcquisition_{i,t} = \beta MaxWgt_{i,t} + \Gamma' Control_{i,t} + \delta_{ind} + \delta_t + \epsilon_{i,t}, \tag{8}$$

where a stock's exposure to mutual funds is measured with $MaxWgt_{i,t}$, the maximum weight of stock i across all fund portfolios, as observed by investors at the quarter-end before its

[15] When Chinese fund companies' employees invest in their own funds, regulations require them to hold the fund shares for at least six months. This discourages insiders from exploiting the mispriced NAVs of their funds at the short horizons.

[16] Appendix IA.5 shows large declines in internet searches during a firm's suspension period. Note that our test compares internet searches across suspension events based on the stock's exposure to mutual funds.

trading resumes during quarter t.[17] While a stock may be held by multiple funds during its suspension period, investors likely focus on funds with relatively large portfolio weights. Following this intuition, we use the largest weight across all funds as a proxy for attention.[18] We report robust results using an alternative measure, the number of funds with large weights, in Section IA.6 in the Internet Appendix.

Our variable of interest, $MaxWgt_{i,t}$, is a function of fund portfolio choices, which could be determined by stock and event characteristics that correlate with the firm's information environment. To mitigate this concern, our specifications control for the fractions of the firm owned by other mutual funds and other institutional investors, firm characteristics (e.g., size, book-to-market, number of shareholders) and event characteristics (e.g., the duration of suspension). We also include industry fixed effects and quarter fixed effects (and headquarter city fixed effects, for corporate visits) to account for industry and time differences in our estimation. Our identifying assumption is that conditional on these control variables, suspension events would have similar information acquisition activities in the absence of particular funds that have significant portfolio weights.

In addition, we use a theory-motivated measure to test for price informativeness. Intuitively, if more information is acquired and incorporated into prices, on average, the price movements at resumptions would have a larger magnitude.[19] Hence, we measure price informativeness with $|ResmAR|$, the absolute value of firm-specific price movement at resumptions.[20]

Lastly, we apply an alternative approach to examine whether stock price movements at resumptions are more informative about future firm fundamentals. As common in the

[17]We do not use unobserved portfolio weights in event-level regressions because variation in such weights diminishes to zero for long-lasting, impactful events, resulting in uninformative estimates for the coefficient.

[18]To mitigate the influence of very small funds, we require fund size to be at least 100 million CNY to be considered in these measures.

[19]In our model, Lemma 1 shows that given τ_v, there is a positive relation between $Var[p - v_0]$ and price informativeness Φ. This monotonic relation implies that price informativeness $\Phi = Var[v|p]^{-1} - \tau_v$ can be measured without knowing conditional variance $Var[v|p]$, which is hard to measure in data.

[20]The uncertainty in fundamentals (τ_v in the model) may differ across events. To account for this, we also control for $\sigma(AR)$, the standard deviation of daily abnormal returns over ten subsequent trading days.

literature, we estimate the sensitivity of the firm's cash flows to price movements using an interaction specification:

$$
\begin{aligned}
SUE_{i,t+1} = {} & \beta_1 MaxWgt_{i,t} \times PriceMove_{i,t} + \beta_2 PriceMove_{i,t} + \beta_3 MaxWgt_{i,t} \\
& + \Gamma' Controls_{i,t} + \delta_{ind} + \delta_t + \epsilon_{i,t}
\end{aligned} \tag{9}
$$

where $PriceMove_{i,t}$ is stock i's price movement at resumption ($ResmRet$ or $ResmAR$) during quarter t, and $SUE_{i,t+1}$ is the firm's earnings surprise announced in quarter $t+1$. Suppose a stock's exposure to mutual funds during the suspension period does not change its price informativeness at the resumption, then $MaxWgt$ would be unrelated to the sensitivity: that is, β_1 would be zero. Instead, if stock price movements become more informative about firm cash flows due to its exposure to mutual funds, we would expect β_1 to be positive.

5.2. Increases in Information Acquisition Activities

Panel C of Table 1 shows that an average suspended firm has a CNY 6.3 billion market capitalization and 41.8 thousand shareholders. Only 3% of the firm's equity is owned by mutual funds, which is an order of magnitude lower than the ownership of other institutions. On average, a firm receives 1.4 visits by financial institutions during its suspension period, and fewer than 30% of these visitors are private funds. Suspended firms experience three times more internet searches on mobile devices compared to PCs. More than half of suspended firms are held by mutual funds, and many events have large exposures to these funds.

Table 7 reports our estimation results for the effect of a stock's exposure to mutual funds on investor corporate visits during suspensions. The dependent variable in columns (1)-(2) is the number of visits by all financial institutions.[21] Our estimates indicate that, controlling for firm ownership by mutual funds and other institutional investors as well as event characteristics, a large exposure to a particular fund significantly increases the frequency of investor visits. On average, a 10% maximum fund portfolio weight attracts 2.2 more visits,

[21] A large fraction of visitors are sell-side analysts who collect information on behalf of their buy-side clients.

or 21% of a standard deviation. Columns (3)-(4) replace the dependent variable with the number of visits by private funds, which are more likely to invest via mutual funds. Our estimates indicate that a 10% increase in the stock's maximum fund portfolio weight attracts 0.9 more visits, or 23% of a standard deviation.

Table 8 reports our results of estimating the same equation replacing the measure of information acquisition with the natural log of internet search indexes during suspensions. In columns (1)-(2), the dependent variable is based on searches from PCs. Our estimates indicate that the exposure to mutual funds has a positive and significant impact on internet searches. The point estimate suggests that, a one-percentage-point increase in the stock's maximum fund portfolio weight leads to a nearly one percent increase in internet searches about the firm. In columns (3)-(4), the dependent variable is based on searches from mobile devices. We find positive and marginally significant estimates for the effect of the stock's maximum fund portfolio weight. This is consistent with that sophisticated investors, such as hedge funds, tend to work with PCs in offices rather than mobile devices.

5.3. Informative Stock Price Movements at Resumptions

Table 9 reports our estimation results for price informativeness measured by $|ResmRet|$. Our estimates show a positive and significant relation between a stock's exposure to mutual funds and the magnitude of its price movement at resumption. In columns (1)-(2), the sample includes all suspension events. On average, a 10% incremental exposure leads to an around 5% larger price movement after controlling for post-resumption stock volatility, the firm's mutual fund and institutional ownership, and other variables.[22]

A caveat in this test is the presence of daily price limits. When these limits are imposed, the supposedly immediate price movement may take multiple days to fully materialize, and hence we cannot claim that the price movement reflects only information acquired during

[22]Table IA.3 in the Internet Appendix further shows that post-resumption price reversal is less severe when the stock had a larger exposure to mutual funds.

the suspension period.[23] To address this concern, in columns (3)–(4) we use a subsample of events where price movements at resumptions are not affected by price limits - the *ResmRet* is entirely realized on first trading day. We find that among these events, the estimated effect is even stronger: a 10% incremental exposure to mutual funds during suspensions leads to a 13% larger price movement at resumptions. Overall, our results are consistent with our model's prediction on the informativeness of price movements at resumptions.

Finally, Table 10 reports our estimation results of the interaction specification in equation (9). Our estimates suggest that stock price movements at resumptions are more sensitive to future firm fundamentals when the stocks have larger exposures to mutual funds during suspensions. Across columns (1)–(4), the point estimates $\hat{\beta}_1$s are positive and statistically significant. Relative to $\hat{\beta}_2$s, the estimates for the coefficient of stock price movement, a 10% increase in the exposure to mutual funds is associated with a roughly 50% higher sensitivity to earnings surprises in the next quarter. This result corroborates our previous evidence on stock price informativeness.

6. Conclusion

This paper explores a liquidity channel through which mutual funds affect investors' information choices. In recent decades, mutual funds have been increasingly investing in illiquid assets. Meanwhile, these funds allow investors to purchase and redeem fund shares on a daily basis. We argue that this liquidity creation facilitates informed investment in illiquid assets, which in turn induces investors to acquire firm-specific information. We derive this insight in a rational-expectations theoretical framework and test our predictions in a unique empirical setting where a significant number of Chinese stocks become perfectly illiquid during trading suspensions. Our findings demonstrate that a stock's exposure to mutual funds significantly

[23] Existing research shows that stocks hitting price limits experience heightened investor attention (Seasholes and Wu, 2007) and price manipulation by large traders (Chen et al., 2019).

increases information acquisition activities. The firm-specific information investors acquire is reflected in the flows to funds with suspended holdings and the informativeness of stock price movements at trading resumptions.

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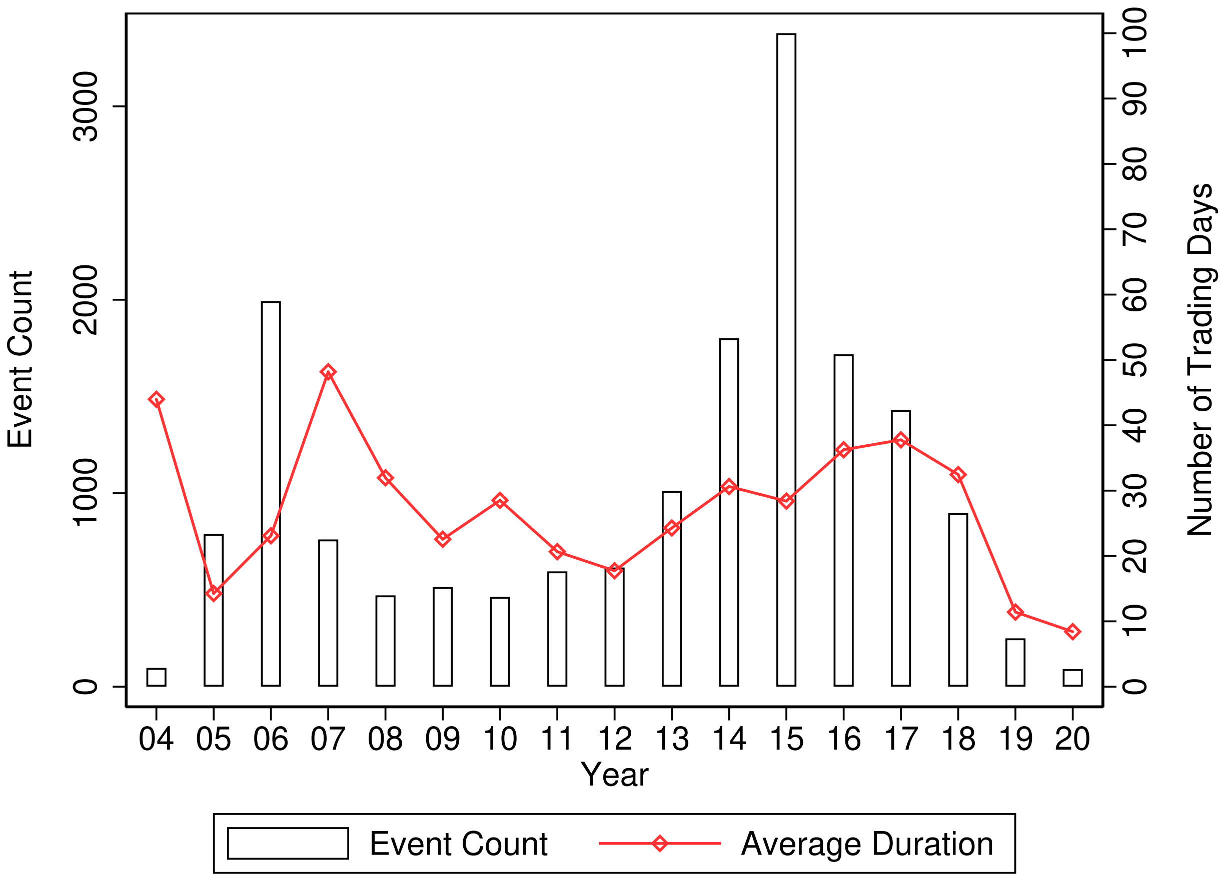
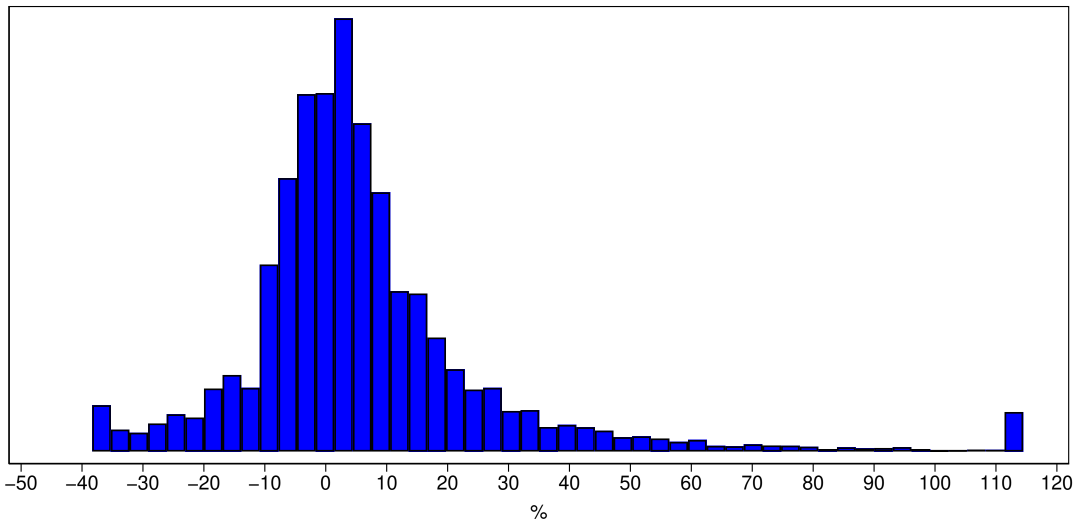


Figure 1: **Stock Trading Suspension Events, 2004–2020.**
This figure plots annual number of stock trading suspension events and average event duration, measured in trading days.

(a) *ResmRet*



(b) *ResmAR*

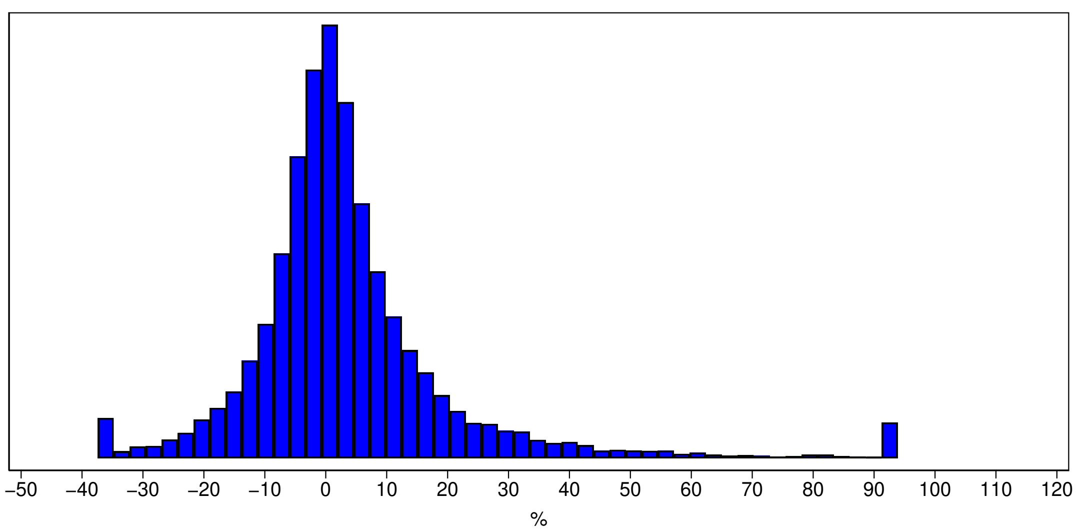


Figure 2: **Stock Price Movements At Trading Resumptions.**
This figure summarizes stock price movements at resumptions, winsorized at the 1st and 99th percentiles. Panel (a) is a histogram of raw returns realized when stock trading resumes. Panel (b) is a histogram of abnormal returns at resumptions, measured as risk-adjusted returns that adjust for market returns between suspension and resumption dates.

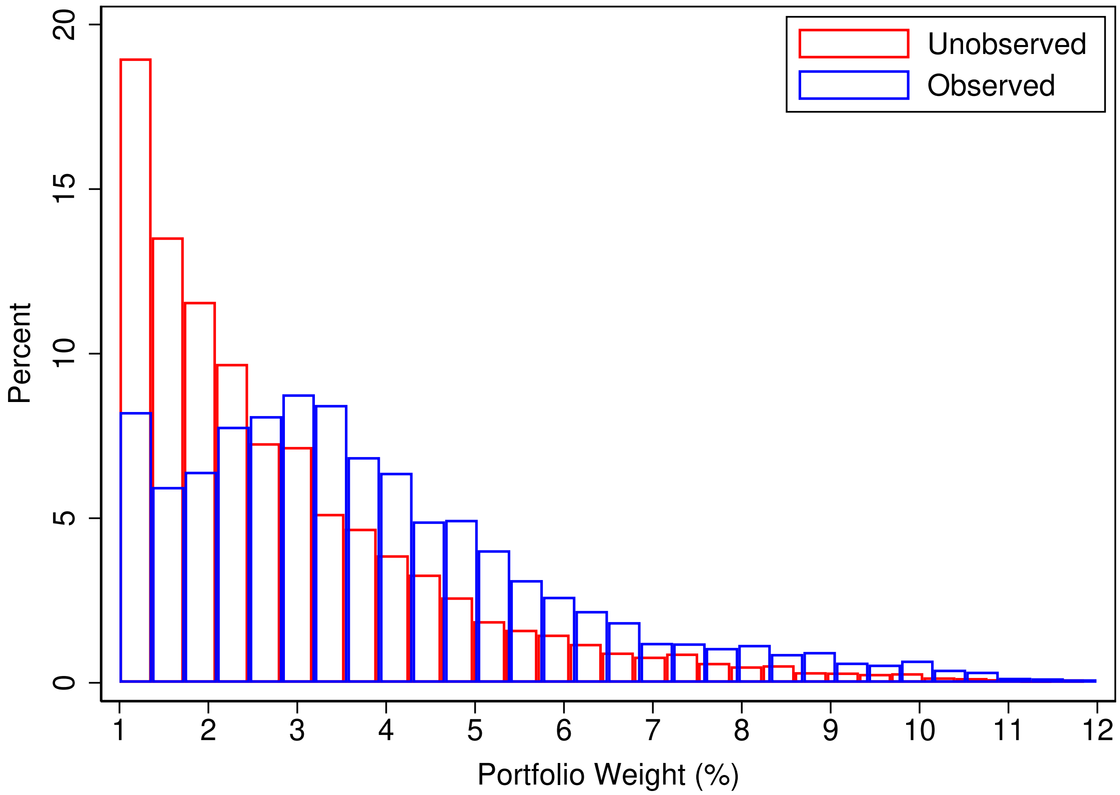


Figure 3: **Fund Portfolio Weight of Suspended Stocks.**
This figure presents histograms of fund portfolio weights in suspended stocks, based on holdings at the end of the quarter before trading resumes. Stock-fund pairs for trading suspension events during 2004–2020 with a reported portfolio weight between 1% and 12% are included. A suspended holding is observed by investors if and only if the portfolio snapshot is disclosed before trading resumes.

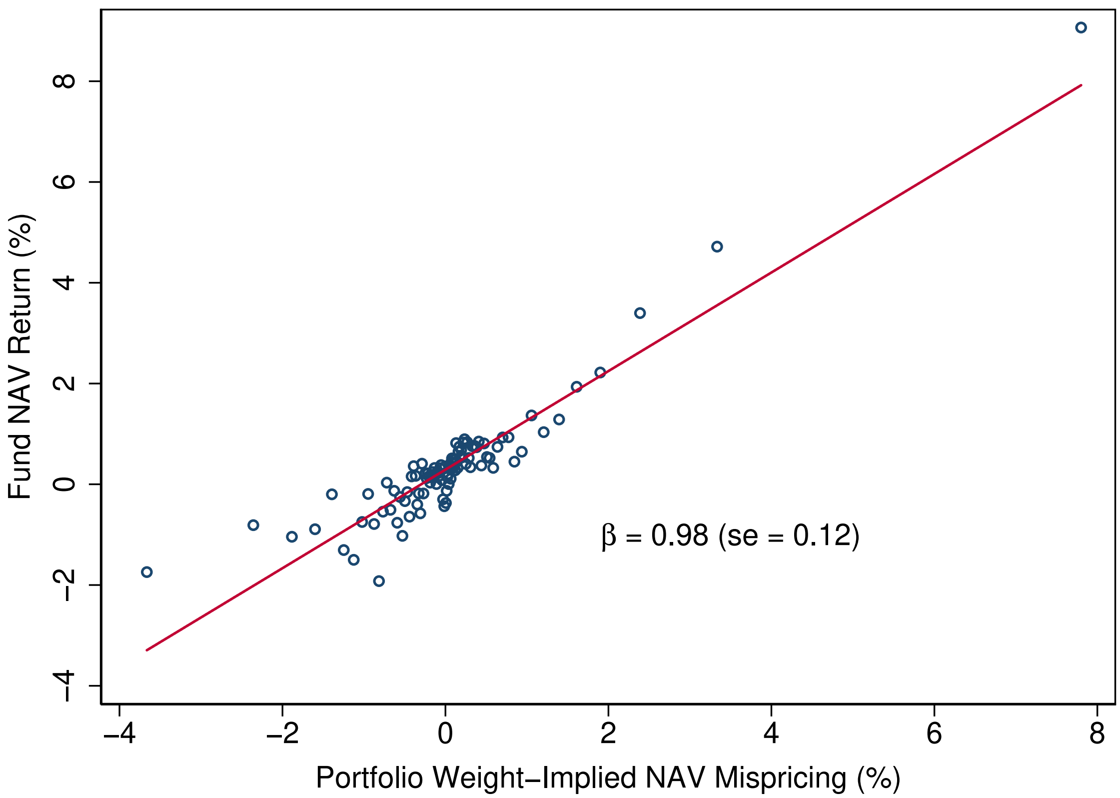


Figure 4: **Fund NAV Movements At Stock Trading Resumptions.**
This figure is a scatter plot that groups suspended fund stock holdings into 100 bins based on their weight-implied impact on fund NAVs at resumptions (i.e., the product of portfolio weight and *ResmRet*). Both axes are measured in percentage points. Fund portfolio holdings are based on disclosed holdings at the end of the quarter before trading resumes. Stock-fund pairs for all trading suspension events with at least a 1% reported portfolio weights between 2004–2020 are included. OLS estimates for slope (β) and heteroskedasticity-robust standard error are reported.

Table 1: **Summary Statistics**

This table presents summary statistics. Panel A summarizes the internet mutual fund forum sample where each observation is a fund–date pair for all sample funds and calendar days between July 2017– December 2020. Daily investor activity measures (Thread, Reply, Score, and Like) are the numbers of new posts, replies, impact scores, and user likes of threads related to suspended holdings. $SuspWgt$ is the the total weight of stocks in the fund's portfolio that are suspended. Panel B summarizes the fund flow sample, where each observation is a fund–quarter pair for all sample funds and quarters between 2004–2020. *Flow* is quarterly net flow into a fund. $Mispricing$ is fund NAV mispricing, measured as the product of suspended holding's portfolio weight and its *ResmRet* (or *ResmAR*), aggregated to the fund level. Fund performance is quarterly abnormal NAV return, and Family Performance is TNA-weighted average performance of funds within a family. Panel C summarizes the suspension event sample. Visit is the number of institutional investors that visit the firm, and Internet Search is total weekly Baidu Search Index of the firm, both measured during its trading suspension period. $\sigma(AR)$ is the standard deviation of daily stock abnormal returns over the first five trading days after the release day of resumption. SUE is standardized unexpected earnings, announced in the quarter after trading resumption. $MaxWgt$ is the maximum weight of the stock across all fund portfolios, as observed by investors before trading resumption. Mutual Fund Ownership is the fraction of the firm's equity held by mutual funds, and Institutional Ownership is the fraction held by institutional investors excluding mutual funds. *SuspDays* is the suspension event's number of trading days. Earnings Announcement and Other Announcement are the numbers of firm announcements related and unrelated to earnings made during the suspension period. *Obs* and *Unobs* indicate that a measure is calculated based on holdings currently observed and unobserved by investors. Fund TNA and firm market capitalization are in CNY millions.

Panel A: Internet Mutual Fund Forum Activity Sample

	N	mean	sd	p90	p95	p99	max
Thread	1,530,089	0.001	0.043	0	0	0	11
Reply	1,530,089	0.001	0.199	0	0	0	196
Score	1,530,089	0.003	0.164	0	0	0	47
Like	1,530,089	0.001	0.174	0	0	0	202
Obs SuspWgt	1,530,089	0.8%	2.5%	3.0%	5.3%	11.6%	63.9%
Unobs SuspWgt	1,530,089	0.2%	0.9%	0.4%	1.7%	4.2%	24.8%

Table 1: **Summary Statistics - Continued**

Panel B: Fund Flow Sample

	N	mean	sd	p1	p50	p99
Flow	29,938	-3.8%	20.8%	-49.4%	-4.0%	75.0%
Obs Mispricing: *ResmRet*	29,938	0.0%	0.6%	-1.2%	0.0%	1.4%
Unobs Mispricing: *ResmRet*	29,938	0.0%	0.3%	-0.6%	0.0%	0.5%
Obs Mispricing: *ResmAR*	29,938	0.0%	0.4%	-1.0%	0.0%	1.2%
Unobs Mispricing: *ResmAR*	29,938	0.0%	0.2%	-0.5%	0.0%	0.4%
Fund Performance	29,938	1.0%	7.7%	-19.4%	0.6%	23.3%
Fund TNA	29,938	2,001.2	3,202.4	104.6	878.3	15,069.8
Fund Age (year)	29,938	5.7	3.7	1.3	4.6	15.9
FundRetVol	29,938	5.4%	3.4%	0.3%	4.9%	16.4%
Purchase Fee	29,938	0.0%	0.0%	0.0%	0.0%	0.0%
Redemption Fee	29,938	0.4%	0.2%	0.0%	0.5%	1.0%
Expense Ratio	29,938	1.6%	0.4%	0.2%	1.8%	2.2%
Family TNA	29,938	33,123.3	32,149.4	775.1	24,483.1	145,651.7
Family Performance	29,938	0.7%	5.3%	-14.0%	0.7%	14.2%

Panel C: Suspension Event Sample

	N	mean	sd	p1	p25	p50	p75	p99
Visit: All Institutions	7,570	1.4	10.2	0.0	0.0	0.0	0.0	38.0
Visit: Private Funds	7,570	0.4	3.9	0.0	0.0	0.0	0.0	12.0
Internet Search: PC	9,165	4,795	39,586	0	443	1,401	4,025	40,427
Internet Search: Mobile	7,189	19,317	582,738	178	932	2,480	6,655	59,623
$\|ResmAR\|$	16,385	12.8%	40.2%	0.1%	2.7%	6.3%	13.4%	95.7%
$\sigma(AR)$	16,191	3.2%	2.3%	0.5%	1.8%	2.8%	4.2%	8.9%
SUE	14,998	0.0	1.7	-6.5	-0.6	0.0	0.5	7.4
MaxWgt	16,385	2.0%	2.8%	0.0%	0.0%	0.2%	3.5%	10.0%
Mutual Fund Ownership	16,385	3%	5%	0%	0%	0%	3%	22%
Institutional Ownership	16,385	37%	25%	-1%	12%	39%	58%	85%
Suspension Duration	16,385	28.8	64.4	2.0	5.0	10.0	28.0	204.0
Market Capitalization	16,385	6,381	18,282	172	1,304	3,089	6,325	54,377
Number of Shareholder	16,385	41,811	58,330	4,638	14,763	25,852	47,004	277,468
Book to Market	16,385	0.49	1.19	0.00	0.00	0.00	1.00	4.00
Earnings Announcement	16,385	1.9	4.2	0.0	0.0	1.0	2.0	18.0
Other Announcement	16,385	0.3	0.2	-0.1	0.2	0.3	0.4	0.8

Table 2: **Predict Stock Price Movements at Resumption**

This table reports estimates from regressing *ResmRet*, stock return realized at trading resumption, on ex-ante variables measured over the suspension period: stock market, cumulative earnings surprises (SUE), and an AI trading signal extracted from corporate announcements. SuspDays is the suspension event's number of trading days. SUE is set as zero if no earnings announcement was made during the suspension period. Each observation is a stock trading suspension event between 2004–2020. Columns (1)-(3) include all suspension events. Columns (4)-(5) include events for which the textual content of corporate announcements is available and used to generate a trading signal $(-1, 0, 1)$ from GPT-3.5-Turbo AI model. Heteroskedasticity-robust standard errors are reported in parentheses. *, **, *** represent 10%, 5%, and 1% levels of statistical significance.

Dependent Variable: *ResmRet*

	(1)	(2)	(3)	(4)	(5)
Market Return	1.844***	1.806***	1.799***		1.787***
	(0.180)	(0.176)	(0.174)		(0.223)
Log(SuspDays)		0.036***	0.037***		0.045***
		(0.004)	(0.004)		(0.006)
SUE			0.031***		
			(0.008)		
AI Signal				0.057***	0.056***
				(0.021)	(0.017)
Intercept	0.030***	-0.060***	-0.060***	0.094***	-0.070***
	(0.004)	(0.012)	(0.012)	(0.004)	(0.017)
N	16,879	16,879	16,879	8,802	8,802
R^2	0.343	0.352	0.356	0.003	0.340

Table 3: **Investor Internet Forum Activities and Suspended Stock Holdings**

This table reports estimates from regressions of investor internet forum activity measures on suspended fund stock holdings. Each observation is a fund-day pair for calendar days between July 2017–December 2020. In columns (1)–(4), the dependent variables are the daily numbers of new posts, replies, impact scores, and user likes of threads related to suspended holdings. In Panel A, regressor $SuspWgt$ is the total weight of stocks in the fund's portfolio that are suspended. In Panel B, regressors $SuspWgt \in (0, 5\%]$, $SuspWgt \in (5, 10\%]$, and $SuspWgt > 10\%$ are dummy variables that equal one if $SuspWgt$ is within $(0, 5\%]$, $(5, 10\%]$, and $> 10\%$, respectively. *Obs* and *Unobs* indicate that stock holdings that are currently observed and unobserved by investors. Standard errors are two-way clustered at the stock and week levels and reported in parentheses. *, **, *** represent 10%, 5%, and 1% levels of statistical significance.

Panel A: Continuous Regressors

	(1)	(2)	(3)	(4)
	Thread	Reply	Score	Like
Obs SuspWgt	0.137***	0.133**	0.424***	0.056**
	(0.033)	(0.063)	(0.099)	(0.024)
Unobs SuspWgt	0.041	0.052	0.139	0.030
	(0.034)	(0.055)	(0.111)	(0.019)
Fund Fixed Effects	Y	Y	Y	Y
Date Fixed Effects	Y	Y	Y	Y
N	1.53m	1.53m	1.53m	1.53m
R^2	0.020	0.004	0.016	0.002
Test: *Obs* SuspWgt = *Unobs* SuspWgt				
F statistic	18.79	4.34	15.68	2.13
p value	0.000	0.039	0.000	0.146

Panel B: Dummy Regressors

	(1)	(2)	(3)	(4)
	Thread	Reply	Score	Like
Obs SuspWgt$\in (0, 5\%]$	0.001***	0.001***	0.003***	0.001***
	(0.000)	(0.000)	(0.001)	(0.000)
Obs SuspWgt$\in (5\%, 10\%]$	0.007***	0.005***	0.023***	0.001**
	(0.002)	(0.001)	(0.005)	(0.001)
Obs SuspWgt$> 10\%$	0.020***	0.023*	0.063***	0.009**
	(0.006)	(0.012)	(0.017)	(0.004)
Unobs SuspWgt$\in (0, 5\%]$	-0.000	-0.001	-0.000	0.000
	(0.000)	(0.001)	(0.001)	(0.000)
Unobs SuspWgt$\in (5\%, 10\%]$	0.007	0.008	0.022	0.004
	(0.005)	(0.005)	(0.015)	(0.003)
Unobs SuspWgt$> 10\%$	0.005	-0.001	0.029	-0.000
	(0.006)	(0.001)	(0.030)	(0.001)
Fund Fixed Effects	Y	Y	Y	Y
Date Fixed Effects	Y	Y	Y	Y
N	1.53m	1.53m	1.53m	1.53m
R^2	0.019	0.004	0.015	0.002

Table 4: **Mutual Fund Flows and NAV Mispricing**

This table reports estimates from regressions of fund flows on the fund's NAV mispricing caused by suspended holdings. Each observation is a fund–quarter pair for quarters between 2006–2020. *Mispricing* is fund NAV mispricing, measured as the product of suspended holding's portfolio weight and its resumption return, aggregated to the fund level. Resumption return is measured with *ResmRet* in columns (1)-(2) and *ResmAR* in columns (3)-(4). Fund performance is quarterly abnormal NAV return, and Family Performance is TNA-weighted average performance of funds within a family. *Obs* and *Unobs* indicate that the measure is calculated based on holdings currently observed and unobserved by investors. Standard errors are clustered at the fund level and reported in parentheses. *, **, *** represent 10%, 5%, and 1% levels of statistical significance.

Dependent Variable: *Flow*

	ResmRet		*ResmAR*	
	(1)	(2)	(3)	(4)
Obs Mispricing	1.72***	1.75***	2.00***	2.01***
	(0.34)	(0.34)	(0.46)	(0.46)
Unobs Mispricing	-0.33	-0.28	0.40	0.49
	(0.62)	(0.62)	(0.65)	(0.66)
Performance	0.33***	0.32***	0.32***	0.31***
	(0.03)	(0.03)	(0.03)	(0.03)
Log(TNA)		-0.01***		-0.01***
		(0.00)		(0.00)
Log(Age)		0.02***		0.02***
		(0.00)		(0.00)
FundRetVol		0.40***		0.40***
		(0.07)		(0.07)
Repurchase Fee		-5.09*		-5.08*
		(2.73)		(2.69)
Redemption Fee		-0.44		-0.47
		(0.90)		(0.89)
Expense Ratio		-1.40***		-1.36***
		(0.49)		(0.49)
Log(Familiy TNA)		0.01***		0.01***
		(0.00)		(0.00)
Family Performance		0.02		0.02
		(0.04)		(0.04)
Year-Quarter Fixed Effects	Y	Y	Y	Y
N	29,938	29,938	29,938	29,938
R^2	0.051	0.059	0.050	0.058
Test: *Obs* Mispricing = *Unobs* Mispricing				
F statistic	9.23	9.11	4.20	3.76
p value	0.002	0.003	0.041	0.053

Table 5: **Mutual Fund Flows and NAV Mispricing: Piecewise Linear Specifications**

This table reports estimates from regressions of fund flows on the fund's NAV mispricing caused by suspended holdings. Each observation is a fund–quarter pair for quarters between 2006–2020. Piecewise linear variables are defined as $Underpricing = \max\{Mispricing, 0\}$ and $Overpricing = \min\{Mispricing, 0\}$, where $Mispricing$ is measured as the product of suspended holding's portfolio weight observed by investors and its resumption return, aggregated to the fund level. Resumption return is measured with *ResmRet* in columns (1)-(2) and *ResmAR* in columns (3)-(4). Fund performance is quarterly abnormal NAV return. Fund control variables are the same as in Table 4. Standard errors are clustered at the fund level and reported in parentheses. *, **, *** represent 10%, 5%, and 1% levels of statistical significance.

Dependent Variable: *Flow*

	ResmRet		*ResmAR*	
	(1)	(2)	(3)	(4)
Underpricing	2.20***	2.19***	3.00***	3.07***
	(0.39)	(0.39)	(0.56)	(0.56)
Overpricing	-0.02	0.20	0.02	-0.13
	(0.39)	(0.39)	(0.48)	(0.49)
Performance	0.33***	0.32***	0.32***	0.33***
	(0.03)	(0.03)	(0.03)	(0.03)
Fund Controls	N	Y	N	Y
Year-Quarter Fixed Effects	Y	Y	Y	Y
N	29,938	29,938	29,938	29,938
R^2	0.051	0.059	0.051	0.059

Table 6: **Changes in Fund Ownership and NAV Mispricing**

This table reports estimates from regressions of investors' fund ownership on the fund's NAV mispricing caused by suspended holdings. Each observation is a fund–semiyear pair between 2006–2020. In columns (1), (2), and (3), the dependent variable $\Delta Ownership$ is the proportional change in the number of fund shares held by institutional investors, retail investors, and fund company insiders, respectively. $Mispricing$ is fund NAV mispricing, measured as the product of suspended holding's portfolio weight and its resumption abnormal return, aggregated to the fund level. Event Inclusion indicates that $Mispricing$ is calculated based on suspension events with the corresponding minimum duration. Fund control variables include the fund's performance, log size, log age, return volatility, and expense ratio. Standard errors are clustered at the fund level and reported in parentheses. *, **, *** represent 10%, 5%, and 1% levels of statistical significance.

Dependent Variable: $\Delta Ownership$

		Institution	Retail	Insider
Event Inclusion		(1)	(2)	(3)
>1d	Mispricing	1.51**	0.25**	0.40
		(0.59)	(0.11)	(0.66)
	R^2	0.065	0.247	0.040
$\geq$ 10d	Mispricing	1.74***	0.44***	-0.28
		(0.62)	(0.15)	(0.65)
	R^2	0.065	0.247	0.041
$\geq$ 100d	Mispricing	4.53***	1.05***	1.44*
		(1.36)	(0.23)	(0.86)
	R^2	0.065	0.247	0.040
	Fund Controls	Y	Y	Y
	Year-Semiyear Fixed Effects	Y	Y	Y
	N	14,031	14,636	12,567

Table 7: **Exposure to Mutual Funds and Corporate Visits During Suspensions**

This table reports estimates from regressing the number of corporate visits on the stock's exposure to mutual funds. Each observation is a suspension event for SZSE-listed stocks between 2012–2020. The dependent variable is the number of corporate visits by financial institutions during the suspension period. Visits by all institutions are used in columns (1)-(2), and visits by private funds (e.g., hedge funds) are used in columns (3)-(4). $MaxWgt$ is the maximum weight of the stock across all fund portfolios, as observed by investors before trading resumption. Mutual Fund Ownership is the fraction of the firm's equity held by mutual funds, excluding the fund with $MaxWgt$, and Institutional Ownership is the fraction held by institutional investors excluding mutual funds. SuspDays is the suspension event's number of trading days. Earnings Announcement and Other Announcement are the numbers of firm announcements related and unrelated to earnings made during the suspension period. Standard errors are clustered at the stock level and reported in parentheses. *, **, *** represent 10%, 5%, and 1% levels of statistical significance.

Dependent Variable: Number of Corporate Visits

	All Institutions		Private Funds	
	(1)	(2)	(3)	(4)
MaxWgt	23.15***	22.01***	9.04***	8.74***
	(7.51)	(7.38)	(2.88)	(2.83)
Mutual Fund Ownership	-2.28	-1.31	-1.87	-1.61
	(4.68)	(4.65)	(1.61)	(1.59)
Institutional Ownership	-1.50*	-1.61*	-0.69**	-0.72**
	(0.81)	(0.83)	(0.31)	(0.32)
Log(SuspDays)	0.81***	0.48***	0.21***	0.12**
	(0.10)	(0.16)	(0.03)	(0.06)
Log(MarketCap)	1.34***	1.51***	0.46***	0.50***
	(0.31)	(0.33)	(0.12)	(0.13)
Log(Shareholder)	0.13	0.09	0.04	0.03
	(0.22)	(0.22)	(0.08)	(0.08)
Book to Market		2.64***		0.71***
		(0.83)		(0.27)
Log(EarningsAnn)		1.14***		0.29*
		(0.44)		(0.16)
Log(OtherAnn)		0.12		0.04
		(0.25)		(0.09)
Year-Quarter Fixed Effects	Y	Y	Y	Y
City Fixed Effects	Y	Y	Y	Y
Industry Fixed Effects	Y	Y	Y	Y
N	7,558	7,558	7,558	7,558
R^2	0.06	0.06	0.05	0.05

Table 8: **Exposure to Mutual Funds and Internet Searches During Suspensions**

This table reports estimates from regressing internet searches during a stock's suspension on the stock's exposure to mutual funds. Each observation is a suspension event between 2006–2020. The dependent variable is the natural log of the firm's total Baidu Search Index during the suspension period. Searches from PCs are used in columns (1)-(2), and searchs from mobile devices (for 2011-2020) are used in columns (3)-(4). $MaxWgt$ is the maximum weight of the stock across all fund portfolios, as observed by investors before trading resumption. Mutual Fund Ownership is the fraction of the firm's equity held by mutual funds, excluding the fund with $MaxWgt$, and Institutional Ownership is the fraction held by institutional investors excluding mutual funds. SuspDays is the suspension event's number of trading days. Earnings Announcement and Other Announcement are the numbers of firm announcements related and unrelated to earnings made during the suspension period. Standard errors are clustered at the stock level and reported in parentheses. *, **, *** represent 10%, 5%, and 1% levels of statistical significance.

Dependent Variable: Internet Search Index

	PC		Mobile Devices	
	(1)	(2)	(3)	(4)
MaxWgt	0.97***	0.95***	0.54	0.62*
	(0.35)	(0.36)	(0.36)	(0.36)
Mutual Fund Ownership	-0.30	-0.29	-0.59*	-0.63**
	(0.25)	(0.25)	(0.31)	(0.31)
Institutional Ownership	-0.16***	-0.17***	-0.11**	-0.11**
	(0.05)	(0.05)	(0.05)	(0.05)
Log(SuspDays)	0.99***	0.95***	0.98***	0.95***
	(0.01)	(0.01)	(0.01)	(0.01)
Log(MarketCap)	0.25***	0.25***	0.18***	0.17***
	(0.02)	(0.02)	(0.02)	(0.02)
Log(Shareholder)	0.34***	0.34***	0.48***	0.48***
	(0.02)	(0.02)	(0.02)	(0.02)
Book to Market		-0.06		-0.20***
		(0.09)		(0.06)
Log(EarningsAnn)		0.08***		0.08***
		(0.02)		(0.02)
Log(OtherAnn)		0.01		0.00
		(0.01)		(0.01)
Year-Quarter Fixed Effects	Y	Y	Y	Y
Industry Fixed Effects	Y	Y	Y	Y
N	8,762	8,762	7,138	7,138
R^2	0.82	0.82	0.83	0.83

Table 9: **Exposure to Mutual Funds and Stock Price Informativeness at Trading Resumptions: the Magnitude of Price Movement**

This table reports estimates from regressing the informativeness of stock price movement at resumption on the stock's exposure to mutual funds. Each observation is a suspension event between 2004–2020. The dependent variable is $|ResmAR|$, the absolute value of stock abnormal return at trading resumption. Sample in columns (1)-(2) includes all suspension events, and sample in columns (3)-(4) includes only events that are not affected by daily price limits on the resumption day. $MaxWgt$ is the maximum weight of the stock across all fund portfolios, as observed by investors before trading resumption. $\sigma(AR)$ is the standard deviation of daily stock abnormal returns over the first five trading days after the release day of resumption. Mutual Fund Ownership is the fraction of the firm's equity held by mutual funds, excluding the fund with $MaxWgt$, and Institutional Ownership is the fraction held by institutional investors excluding mutual funds. SuspDays is the suspension event's number of trading days. Earnings Announcement and Other Announcement are the numbers of firm announcements related and unrelated to earnings made during the suspension period. Standard errors are clustered at the stock level and reported in parentheses. *, **, *** represent 10%, 5%, and 1% levels of statistical significance.

Dependent Variable: $|ResmAR|$

	All Suspension Events		Events w/o Price Limits	
	(1)	(2)	(3)	(4)
MaxWgt	0.54***	0.51***	1.41***	1.29***
	(0.20)	(0.19)	(0.36)	(0.32)
$\sigma(AR)$	0.97***	0.90***	0.53	0.42
	(0.17)	(0.17)	(0.33)	(0.32)
Mutual Fund Ownership	0.26***	0.26***	0.43***	0.44***
	(0.08)	(0.08)	(0.14)	(0.13)
Institutional Ownership	0.08***	0.07***	0.16***	0.15***
	(0.03)	(0.03)	(0.04)	(0.04)
Log(SuspDays)	0.08***	0.03***	0.11***	0.04***
	(0.01)	(0.00)	(0.02)	(0.01)
Log(MarketCap)	-0.09***	-0.08***	-0.14***	-0.13***
	(0.02)	(0.02)	(0.03)	(0.03)
Log(Shareholder)	0.04***	0.04***	0.07***	0.07***
	(0.01)	(0.01)	(0.02)	(0.02)
Book to Market		0.12**		0.19*
		(0.06)		(0.10)
Log(EarningsAnn)		0.17***		0.28***
		(0.03)		(0.05)
Log(OtherAnn)		0.01		-0.00
		(0.01)		(0.03)
Year-Quarter Fixed Effects	Y	Y	Y	Y
Industry Fixed Effects	Y	Y	Y	Y
N	16,191	16,191	8,809	8,809
R^2	0.11	0.13	0.12	0.16

Table 10: **Exposure to Mutual Funds and Stock Price Informativeness at Trading Resumptions: Sensitivity to Firm Cash Flows**

This table reports estimates from regressing a firm's future earnings surprise on the interaction between the stock's exposure to mutual funds and its price movement at trading resumption. Each observation is a suspension event between 2004–2020. The dependent variable is the firm's standardized unexpected earnings (SUE) announced in the quarter after trading resumption. Stock price movement $PriceMove$ is measured with $ResmRet$ in columns (1)-(2) and $ResmAR$ in columns (3)-(4). $MaxWgt$ is the maximum weight of the stock across all fund portfolios, as observed by investors before resumption. Mutual Fund Ownership is the fraction of the firm's equity held by mutual funds, excluding the fund with $MaxWgt$, and Institutional Ownership is the fraction held by institutional investors excluding mutual funds. SuspDays is the suspension event's number of trading days. Earnings Announcement and Other Announcement are the numbers of firm announcements related and unrelated to earnings made during the suspension period. Standard errors are clustered at the stock level and reported in parentheses. *, **, *** represent 10%, 5%, and 1% levels of statistical significance.

Dependent Variable: SUE

	$ResmRet$		$ResmAR$	
	(1)	(2)	(3)	(4)
WgtMax × PriceMove	4.44**	4.26**	4.76*	4.65*
	(2.11)	(2.11)	(2.67)	(2.68)
PriceMove	0.08**	0.09**	0.09**	0.10**
	(0.03)	(0.03)	(0.04)	(0.04)
MaxWgt	-1.42*	-1.38*	-1.31*	-1.28*
	(0.77)	(0.78)	(0.77)	(0.78)
Mutual Fund Ownership	1.02**	1.00**	1.06**	1.04**
	(0.44)	(0.44)	(0.44)	(0.44)
Institutional Ownership	0.12	0.11	0.12	0.12
	(0.08)	(0.08)	(0.08)	(0.08)
Log(SuspDays)	-0.02*	-0.04***	-0.02*	-0.04***
	(0.01)	(0.02)	(0.01)	(0.02)
Log(MarketCap)	0.13***	0.12***	0.12***	0.12***
	(0.03)	(0.03)	(0.03)	(0.03)
Log(Shareholder)	-0.11***	-0.10***	-0.10***	-0.10***
	(0.03)	(0.03)	(0.03)	(0.03)
Book to Market		-0.25***		-0.25***
		(0.08)		(0.08)
Log(EarningsAnn)		0.03		0.04
		(0.04)		(0.04)
Log(OtherAnn)		0.05		0.05*
		(0.03)		(0.03)
Year-Quarter Fixed Effects	Y	Y	Y	Y
Industry Fixed Effects	Y	Y	Y	Y
N	14,998	14,998	14,998	14,998
R^2	0.04	0.04	0.04	0.04

Internet Appendix

“Information Acquisition by Mutual Fund Investors”

IA.1. Model Proofs

Proof of Lemma 1. Under the model’s distributional assumption, it is standard that an investor’s $t = 1$ optimal investment choice is

$$x(s_i, p) = \frac{\mathbb{E}[v|s_i, p] - p}{\rho Var[v|s_i, p]}, \tag{IA.1}$$

where

$$\mathbb{E}[v|s_i, p] = v_0 + Cov\Big[v, \begin{pmatrix} s_i \\ p \end{pmatrix}\Big]' Var\Big[\begin{pmatrix} s_i \\ p \end{pmatrix}\Big]^{-1} \begin{pmatrix} s_i - v_0 \\ p - p_0 \end{pmatrix}, \tag{IA.2}$$

$$Var[v|s_i, p] = \tau_v^{-1} - Cov\Big[v, \begin{pmatrix} s_i \\ p \end{pmatrix}\Big]' Var\Big[\begin{pmatrix} s_i \\ p \end{pmatrix}\Big]^{-1} Cov\Big[v, \begin{pmatrix} s_i \\ p \end{pmatrix}\Big]. \tag{IA.3}$$

Using the conjectured price function (1), the demand in $(IA.1)$ can be written as

$$x(s_i, p) = \frac{\tau_s}{\rho} s_i + \zeta(p), \tag{IA.4}$$

where ζ is an affine function of p. By law of large numbers, the aggregate demand

$$X(p) = \frac{\tau_s}{\rho} \int_0^1 s_i \, \mathrm{d}i + \zeta(p) + u = \frac{\tau_s}{\rho} v + \zeta(p) + u, \tag{IA.5}$$

so for market makers, curve $X(\cdot)$ is observationally equivalent to $\frac{\tau_s}{\rho} v + u$, and equilibrium price satisfies $p = \mathbb{E}[v|\frac{\tau_s}{\rho} v + u]$. Since $(v, \frac{\tau_s}{\rho} v + u)$ is jointly normal, this implies

$$p = \underbrace{v_0}_{p_0} + \underbrace{\frac{\tau_u \tau_s^2}{\rho^2 \tau_v + \tau_u \tau_s^2}}_{\gamma} (v - v_0) + \underbrace{\frac{\rho \tau_u \tau_s}{\rho^2 \tau_v + \tau_u \tau_s^2}}_{\lambda} u. \tag{IA.6}$$

Substitute γ and λ into $(IA.1)$ and collect terms, it follows that $\zeta(p) = -\frac{\tau_s}{\rho} p$, which in turn leads to the optimal demand schedule in (2).

Next, using the values of γ and λ,

$$Var[v|p] = \tau_v^{-1} - \frac{Cov[v,p]^2}{Var[p]} = \frac{\rho^2}{\rho^2\tau_v + \tau_u\tau_s^2}, \tag{IA.7}$$

rearranging which gives $\Phi = \frac{\tau_u\tau_s^2}{\rho^2}$ in Lemma 1. Moreover, equation (IA.6) implies

$$Var[p - v_0] = \frac{\tau_u\tau_s^2}{\tau_v(\rho^2\tau_v + \tau_u\tau_s^2)}. \tag{IA.8}$$

Given (IA.7), we have $\rho^2\tau_v + \tau_u\tau_s^2 = \rho^2(\Phi + \tau_v)$, and hence

$$Var[p - v_0] = \frac{\tau_u\tau_s^2}{\rho^2\tau_v(\Phi + \tau_v)} = \frac{1}{\tau_v} - \frac{1}{\Phi + \tau_v}. \tag{IA.9}$$

Proof of Proposition 1. Given the model setup, conditional on s_i, v_f is normally distributed. At $t = 1$, if $M = 0$, the investor chooses

$$y(s_i) = \frac{\mathbb{E}[v_f|s_i] - p_f}{\rho Var[v_f|s_i]}, \tag{IA.10}$$

where

$$\mathbb{E}[v_f|s_i] - p_f = \theta(\mathbb{E}[v|s_i] - v_0) = \frac{\theta\tau_s}{\tau_v + \tau_s}(s_i - v_0), \tag{IA.11}$$

$$Var[v_f|s_i] = \theta^2 Var[v|s_i] + (1-\theta)^2 Var[\omega] = \frac{\theta^2}{\tau_v + \tau_s} + \frac{(1-\theta)^2}{\tau_\omega}. \tag{IA.12}$$

Since $\int_0^1 s_i \,\mathrm{d}i = v$, investors' total investment in the fund is

$$\int_0^1 y_i \,\mathrm{d}i = \frac{\theta\tau_s}{(\tau_v + \tau_s)\rho Var[v_f|s_i]}(v - v_0). \tag{IA.13}$$

Meanwhile, for any equilibrium price p, the mispricing of fund shares is

$$\theta(p - v_0) = \theta\gamma(v - v_0) + \theta\lambda u. \tag{IA.14}$$

Since $\gamma > 0$, as shown in (IA.6), and $Cov[v, u] = 0$, it follows that $Cov[\int_0^1 y_i \,\mathrm{d}i, \theta(p - v_0)] > 0$.

Proof of Lemma 2. In the first step, we derive the investor's expected utility at $t = 1$ when the asset is tradable. Substitute (IA.1) into this conditional expected utility and collect terms,

$$V(s_i,p) = -\exp\Big(-\rho W_0 - \frac{(\mathbb{E}[v|s_i,p]-p)^2}{2Var[v|s_i,p]}\Big). \tag{IA.15}$$

The optimal demand schedule (2) implies that $\mathbb{E}[v|s_i,p]-p = \tau_s Var[v|s_i,p](s_i-p)$, hence

$$V(s_i,p) = -\exp\Big(-\rho W_0 - \frac{1}{2}\tau_s^2 Var[v|s_i,p](s_i-p)^2\Big). \tag{IA.16}$$

Since $s_i - p$ is normal with mean zero and variance $Var[s_i-p]$, we can rewrite $(s_i-p)^2$ as $Var[s_i-p]\cdot z$, where z follows a chi-square distribution with one degree of freedom: $z \sim \chi^2(1)$. Using the moment generating function of z, the investor's $t=0$ expectation of $V(s_i,p)$ is

$$\mathbb{E}[V(s_i,p)] = -e^{-\rho W_0}\Big(1+\tau_s^2 Var[v|s_i,p]Var[s_i-p]\Big)^{-1/2}. \tag{IA.17}$$

To simplify the equation above, it can be verified, with the values of γ and λ, that

$$\tau_s Var[v|s_i,p]Var[s_i-p] = Var[v|p]. \tag{IA.18}$$

Therefore

$$\mathbb{E}[V(s_i,p)] = -e^{-\rho W_0}\sqrt{\frac{\tau_v+\Phi}{\tau_v+\tau_s+\Phi}}, \tag{IA.19}$$

which is strictly increasing and concave in τ_s on $\mathbb{R}_+$.

In the second step, we derive the investor's expected utility at $t=1$ when the risky asset non-tradable. Substitute (IA.10) into $\mathbb{E}[u(W_i)|s_i, M=0]$, it follows that

$$V_f(s_i) = -\exp\Big(-\rho W_0 - \frac{(\mathbb{E}[v_f|s_i]-p_f)^2}{2Var[v_f|s_i]}\Big). \tag{IA.20}$$

Recognize that in

$$(\mathbb{E}[v_f|s_i]-p_f)^2 = \frac{\theta^2\tau_s^2}{(\tau_v+\tau_s)^2}(s_i-v_0)^2, \tag{IA.21}$$

variable $(s_i - v_0)$ is normally distributed with zero mean, and we can rewrite $(s_i-v_0)^2 = (\tau_v^{-1}+\tau_s^{-1})\cdot z$, where z follows a chi-square distribution with one degree of freedom: $z\sim\chi^2(1)$.

Using the moment generating function of z, the investor's $t = 0$ expectation of $V_f(s_i)$ is

$$\mathbb{E}[V_f(s_i)] = -e^{-\rho W_0}\left(1 + \frac{\tau_s \tau_\omega}{\tau_v(\tau_\omega + (\frac{1}{\theta} - 1)^2(\tau_v + \tau_s))}\right)^{-1/2}, \tag{IA.22}$$

which is also concave in τ_s for any θ.

In the last step, we characterize the equilibrium. At $t = 0$, the investor takes price p, and hence its informativeness Φ, as given and chooses τ_s to maximize

$$\Pi(\tau_s) = q\mathbb{E}[V(s_i, p)] + (1 - q)\mathbb{E}[V_f(s_i)] - c(\tau_s). \tag{IA.23}$$

Since c is strictly convex, the objective Π is a continuous and strictly concave function of τ_s. The investor's optimal choice is then characterized by first-order condition

$$q\frac{\partial \mathbb{E}[V(s_i, p)]}{\partial \tau_s} + (1 - q)\frac{\partial \mathbb{E}[V_f(s_i)]}{\partial \tau_s} - c'(\tau_s) = 0. \tag{IA.24}$$

If an equilibrium exists, every investor chooses τ_s given $\Phi = \frac{\tau_s^2 \tau_u}{\rho^2}$. In equilibrium, τ_s solves equation (4) in the text:

$$q \cdot \psi(\tau_s) + (1 - q)\varphi(\tau_s, \theta) = c'(\tau_s), \tag{IA.25}$$

where

$$\psi(\tau_s) = 2e^{-\rho W_0}\left(\tau_v + \frac{\tau_s^2 \tau_u}{\rho^2}\right)^{1/2}\left(\tau_v + \tau_s + \frac{\tau_s^2 \tau_u}{\rho^2}\right)^{-3/2} \tag{IA.26}$$

is strictly decreasing on $\mathbb{R}_+$ and lower bounded by zero, and

$$\varphi(\tau_s, \theta) = 2e^{-\rho W_0}\tau_\omega(\tau_v + \tau_s)^{-3/2}\left(\frac{\tau_v}{(\tau_\omega + (\frac{1}{\theta} - 1)^2\tau_v)(\tau_\omega + (\frac{1}{\theta} - 1)^2(\tau_v + \tau_s))}\right)^{1/2} \tag{IA.27}$$

is strictly decreasing in τ_s and strictly increasing in θ. Thus, the left hand side of (IA.25) is a continuous function that is positive at $\tau_s = 0$, strictly decreasing in τ_s, and approaches zero as τ_s goes to infinity. Since the right hand side satisfies $c'(0) = 0$ and is continuous and strictly increasing, there exists a unique equilibrium.

IA.2. Processing Announcements with AI

This section explains how we use OpenAI's GPT-3.5-turbo Large Language Mode (LLM) to process the textual information in corporate announcements.

IA.2.1. Prepare Textual Information

We begin with all announcements made during the suspension period and exclude earnings announcements, for which the information is already quantified by our earnings surprise measure. Next, we filter, clean, and standardize the raw textual information.

To remove uninformative briefings, we require the announcement text to be no shorter than 50 Chinese characters. In some suspension events, the firm regularly releases announcements with almost identical content. We remove such repetitive announcements as follows. For each announcement, we calculate a textual similarity score based on the generalized edit distance between the content of the announcement and every subsequent announcement made during the same suspension event. If multiple announcements are highly similar, we keep only the latest one within the suspension event. We then sort all filtered announcements of a suspension event by announcement date and concatenate them into a single string as input.

IA.2.2. Prompts

The GPT-3.5-turbo is a chat-based model that simulates a conversation between the user and a system, which requires high-level instructions that help guide the model's responses to specific instructions in our message. We write our prompts in Chinese language. This not only improves the AI model's performance in processing information in the context of the Chinese stock market, but also helps avoid potential lead-ahead bias stemming from the model's training data. Below are our prompts.

High-level instructions:

> 您是一位有丰富经验的中国股票投资专家。请记住，停牌期间如果宣布重大资产或债务重组成功，复牌后股价往往大涨，而如果重大项目失败，复牌后股价通常下跌。然而，重大事件的筹划，以及停复牌，分红派息，并购，发行证券等并一定不意味着公司股价会因此而上升或下降。股价取决于事件的结果是否优于预期。

Content of our message:

> 以下为某上市公司在停牌期间发布的公告。回复'涨'如果您预测复牌后股价会上涨，'跌'如果您预测股价会下跌，或者'不知道'如果您没有把握判断未来股价方向。不要解释具体原因。这里是公告内容： [input announcement here].

Our prompt instructs the AI model to act as an expert Chinese stock investor and evaluate the impact of corporate announcements on stock prices, with an emphasis on the progress (e.g., success or failure) of major events. The AI's response is a single word indicating its prediction of whether stock price will go "up" or "down" after trading resumes. If the AI is uncertain, it will respond with "I don't know". We convert these responses into a numerical variable, which takes values -1, 0, or 1.

IA.3. Fund Valuation Adjustment for Suspended Stocks

During a stock's suspension period, fund companies can adjust the stock's valuation in their calculation of fund NAVs. For a subset of events where suspensions and resumptions occur in two separate quarters, we can observe the suspended stock's share value reported by the fund at the last quarter-end prior to resumption. There are 2,972 such events and 35,285 fund-event pairs, where 50.3% of pairs adjusted the share value during suspension.

Table IA.1 reports empirical patterns of valuation adjustment among our sample funds. Columns (1)–(2) show that within a fund family and controlling for the duration of suspension, funds with higher insider ownerships, better performance, and higher expense ratios are more likely to adjust the valuation of suspended holdings. In columns (3)–(4), the change in stock valuation after adjustment is uncorrelated with fund ownership structure or the duration of suspension. Moreover, better-performing funds are more likely adjust the valuation downward.

In Table IA.2, we explore what information fund companies use in their adjustment of stock valuations. Notably, the average fund valuation adjustment positively predicts stock movements at resumption. However, the predictive power of the valuation adjustment is completely subsumed when we include market returns in the regression, suggesting that fund companies do not adjust the valuation of suspended stocks beyond market returns.

IA.4. Holdings Observed and Unobserved by Investors

This section provides details on how we determine suspended fund stock holdings observed and unobserved by investors at different points of time in our fund-level samples.

IA.4.1. Internet Mutual Fund Forum Investor Activities Sample

This is a fund–day panel of investor activities on EastMoney, an internet forum used by Chinese mutual fund investors, for all sample funds and calendar days between July 2017–December 2020.

(a) Observed suspended holdings (*obs*) on a day:

  i. We inner join a dataset of currently suspended stock-day pairs with all fund holdings at the end of the two preceding quarters that are disclosed before the current day. We then keep the most recently disclosed stock–day–fund observation if the trio is matched to two portfolio snapshots. Next, we aggregate portfolio weight of suspended holdings to the fund-day level.

  ii. These are suspended holdings suggested by the portfolio snapshot that investors can observe on the day.

(b) Unobserved suspended holdings (ubs) on a day:

   i. We inner join a dataset of currently suspended stock-day pairs with all fund holdings for which the portfolio snapshot date is before the resumption date and are disclosed after the current day. We keep the earliest fund–day–stock observation if the trio is matched to two portfolio snapshots. We then exclude a fund–day–stock observation if it is in the observed suspended holdings above. Next, we aggregate portfolio weight of suspended holdings to the fund–day level.

   ii. These are suspended holdings that investors would have believed to exist if they had more timely information on fund holdings on the day.

IA.4.2. Fund Flows Sample

This is a fund–quarter panel for all sample funds between 2004–2020.

(a) Observed suspended holdings (obs) in quarter t:

   i. To ensure that our quarterly flow observation is associated with only information before trading resumption, we create a dataset of stock suspension events for which suspension begins at least 10 trading days before, and trading resumes no more than 30 trading days after, the end of quarter t. We then inner join this dataset with all fund holdings at the end of quarter $t-1$.

   ii. These are suspended stock holdings suggested by the portfolio snapshot that investors can observe during the quarter of flow measurement.

(b) Unobserved suspended holdings (ubs) in quarter t:

   i. We inner join the same dataset of stock suspension events with all fund holdings at the end of quarter t. We then exclude a stock–event–fund if it is among observed suspended holdings in (a).

ii. These are suspended holdings that investors would have believed to exist if they had more timely information on fund holdings during the quarter of flow measurement.

IA.5. Internet Searches Around Suspensions and Resumptions

Internet searches capture the extent to which investors access public information about a firm. To estimate how such activities change around suspension and resumption events, we separately regress the natural logarithm of a stock's weekly Baidu Search Index on two groups of weekly dummy variables. These dummies indicate the time intervals relative to suspension and resumption events. Specifically, suspension dummies equal one for weeks ranging from -1 to -7 and beyond -7 weeks before suspension, and from 1 to 7 and beyond 7 weeks after suspension. Resumption dummies are defined in a similar manner. For post-suspension dummies and pre-resumption dummies to equal one, we require the stock to be in suspension during the week. When estimating the coefficients of suspension dummies, we exclude stock-week pairs within the $[-7, +10]$ window around resumption, and vice versa for resumption dummies.

We use search indexes from mobile devices and PCs as our dependent variables. In all specifications, we control for the natural logarithm of the number of shareholders, the book-to-market ratio, stock fixed effects, and week fixed effects.

Figure IA.4 displays our estimation results. Panel A shows that before suspensions, mobile search index is stable and similar to, or slightly lower than, stock-week pairs that are not around suspension events. Once the suspension starts, search index jumps up by 15% in the first week and then quickly declines, until becoming 40% lower than usual after the seventh week. This pattern suggests that when a stock enters a prolonged suspension, investors gradually lose interest in learning about the firm. Comparing Panels A and B, our estimates based on searches from mobile devices and PCs are very similar.

Unlike suspensions, which are unanticipated, investors update their beliefs on the likelihood of resumptions as firms update on their corporate progress. Consistent with our prediction that the chance of trading increases information production, Panels C and D show that search index gradually increases from the fourth week before resumption. Search index has a sudden spike of roughly 30% greater than usual during the first week of trading resumption, after which the index slowly converges towards normal levels.

IA.6. Measurement of Exposure to Mutual Funds

In Section 5, our measure of a suspended stock's exposure to mutual funds, $MaxWgt$, is the maximum portfolio weight across all funds. This section presents robustness tests that replace $MaxWgt$ with $NFundLargeWgt$, which is the number of mutual funds with at least 3% of portfolio weight in the suspended stock, as observed by investors before trading resumption. Accordingly, we calculate the control variable Mutual Fund Ownership by excluding the equity stake held by these funds.

Panels A, B, C, and D of Table IA.4 report results of re-estimating the specifications in Tables 7, 8, 9, and 10. Overall, the estimates are qualitatively similar to our main results, with comparable quantitative magnitudes.

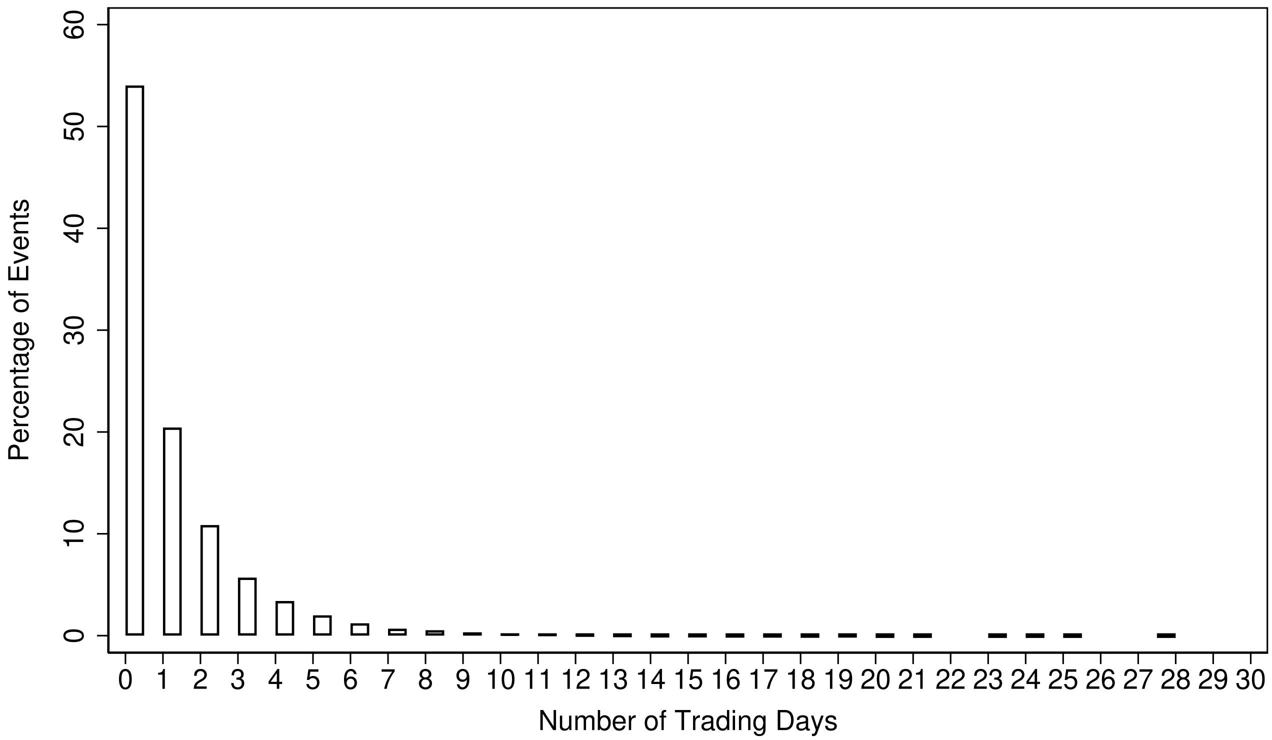


Figure IA.1: **Number of Trading Days of Hitting Price Limits After Resumption.** This figure presents a histogram for the number of consecutive trading days that a stock hits daily price limits after resumption.

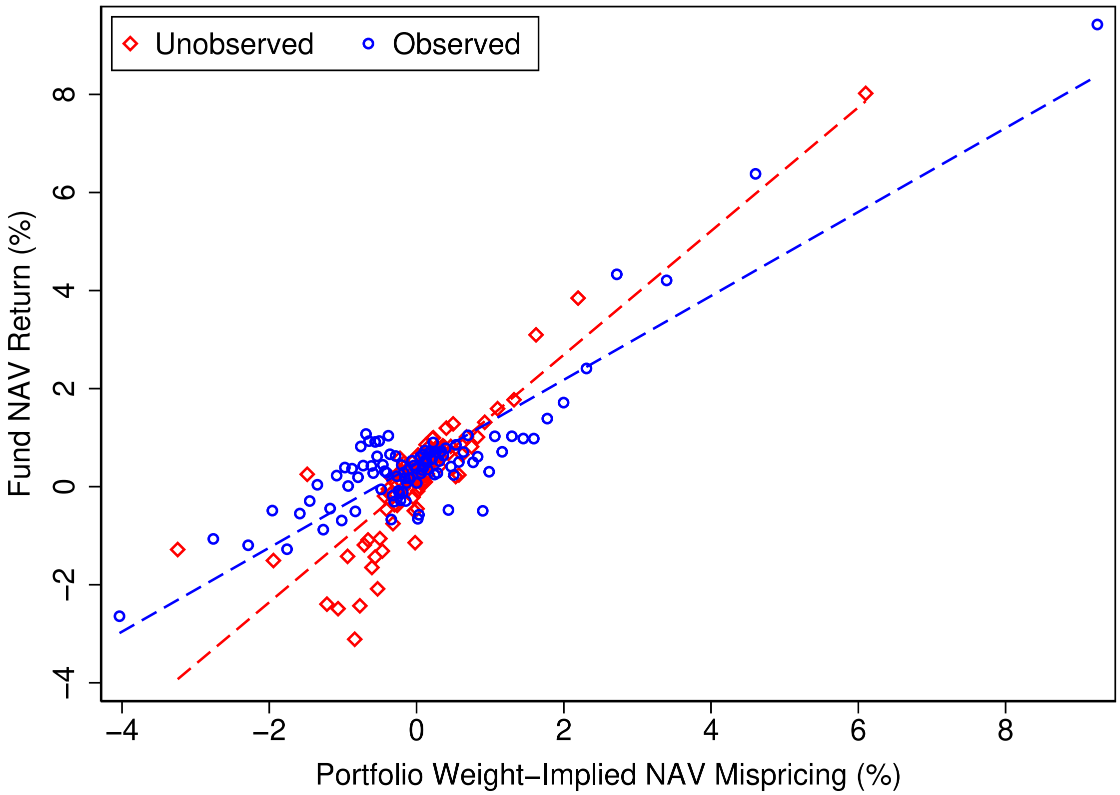
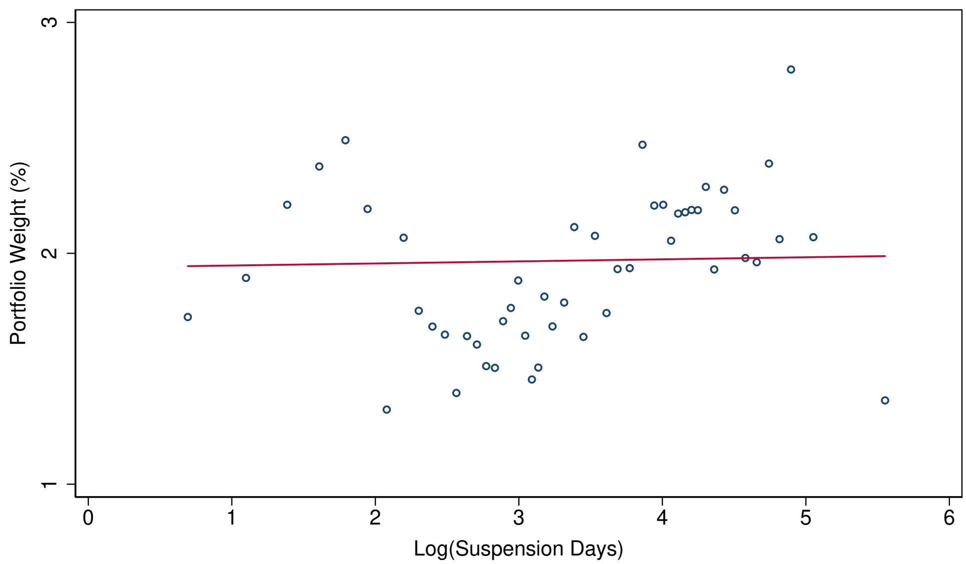


Figure IA.2: **Fund NAV Movements At Stock Trading Resumptions: Visibility of Holdings.**
This figure produces the scatter plot in Figure 4 separately for suspended fund holdings that are observed and unobserved by investors before trading resumes. Suspended fund stock holdings are grouped into 100 bins based on their weight-implied impact on fund NAVs at resumptions (i.e., the product of portfolio weight and *ResmRet*). Both axes are measured in percentage points. Fund portfolio holdings are based on disclosed holdings at the end of the quarter before trading resumes. Difference between the two slope coefficients are statistically insignificant. Stock-fund pairs for all trading suspension events with at least a 1% reported portfolio weights between 2004–2020 are included.

(a) Observed Fund Portfolio Weight



(b) Unobserved Fund Portfolio Weight

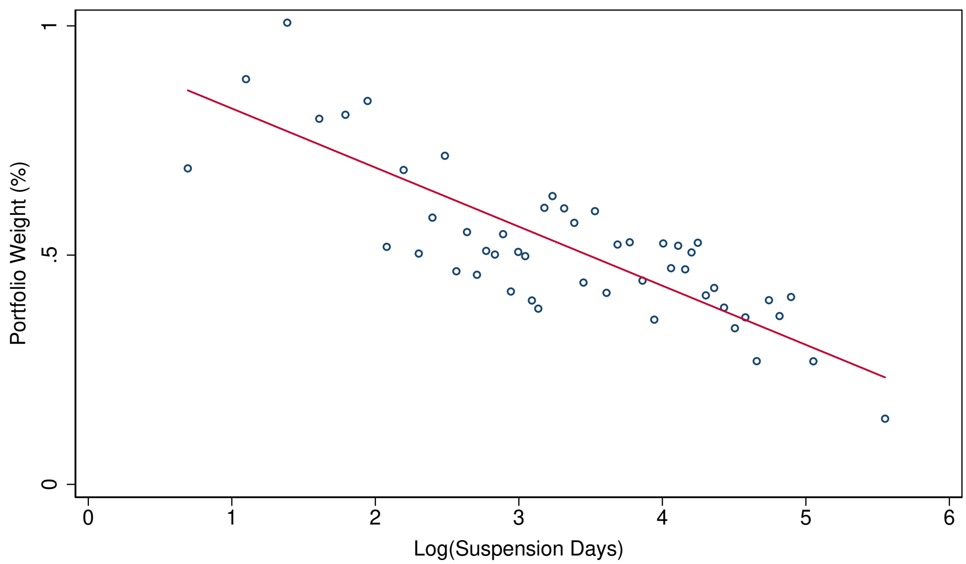


Figure IA.3: **Unobserved Portfolio Weights Mechanically Decline for Suspensions with Longer Durations.**
This figure presents a scatter plot that groups stock suspension events into 100 bins based on the number of trading days between the suspension and resumption dates. Panel (a) reports the averages of maximum fund portfolio weight observed by investors before resumptions. Panel (b) reports the averages of maximum fund portfolio weight that are unobserved by investors before resumptions. The maximum portfolio weights are based on funds with at least 100 million CNY of total net assets.

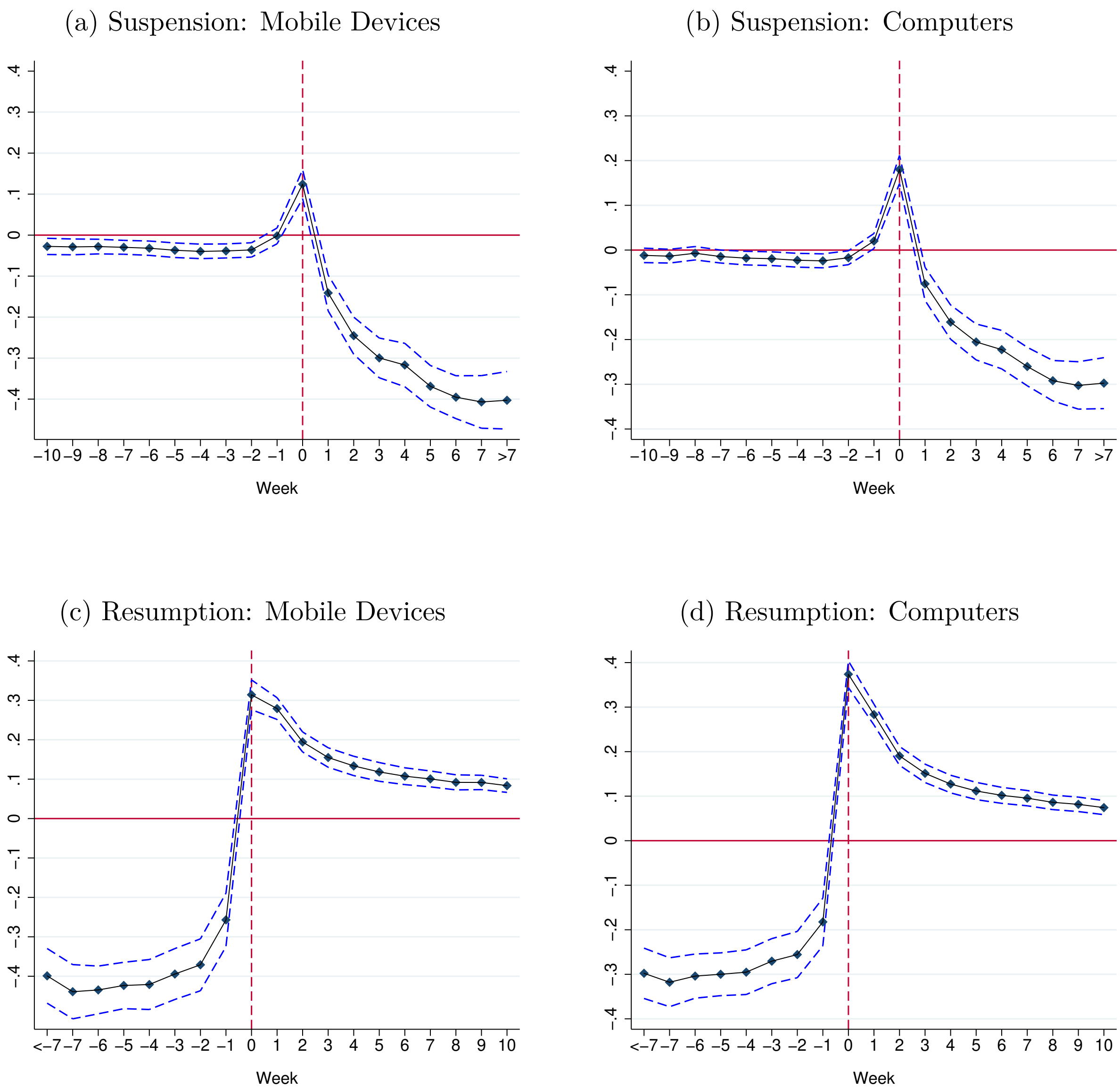


Figure IA.4: **Internet Searches Around Suspension and Resumption Events.**
This figure presents estimates from regressing the natural log of a stock's weekly Baidu search index on two groups of weekly dummy variables. The two groups of dummies indicate whether the time intervals between the current week and the week of suspension and resumption, respectively. Post-suspension dummies $\{1, 2, 3, 4, 5, 6, 7, >7\}$ and pre-resumption dummies $\{-1, -2, -3, -4, -5, -6, -7, <\text{-}7\}$ equal one only if the stock-week is in suspension. When estimating coefficients for dummies around suspension, the sample excludes stock-week pairs within $[-7, +10]$ weeks around resumption. When estimating coefficients for dummies around resumption, the sample excludes stock-week pairs within $[-10, +7]$ weeks around suspension. Searches from mobile devices and computers are separately reported in Panels (a), (c) and Panels (b), (d). Control variables include the natural log of the number of shareholders, book-to-market ratio, stock fixed effects, and week fixed effects. Dash lines indicate 99% confidence intervals. Standard errors are two-way clustered at the stock and week levels.

Table IA.1: **Fund Ownership and Valuation Adjustment**

This table reports results from estimating regressions of stock valuation adjustment during suspension on fund ownership. Each observation is a fund–event pair for suspension events between 2004–2020 where suspension and resumption occur in two different quarters, and the fund's reported stock valuation during suspension is observed. Vauation adjustment is measured as the change from the closing price at suspension to fund-reported share value at the last quarter-end prior to resumption. In column (1)–(2), the dependent variable is a dummy that equals one if the fund adjusts the valuation of the suspended stock. In columns (3)–(4), dependent variable $ValAdj$ is the change in valuation after adjustment. Insider Ratio and Instituion Ratio are the fractions of fund shares held by fund company insiders and institutional investors, respectively, measured at the end of the most recent semiyear. SuspDays is the suspension event's number of trading days. Fund performance is quarterly abnormal NAV return. Standard errors are two-way clustered at the stock level and the fund level and reported in parentheses. *, **, *** represent 10%, 5%, and 1% levels of statistical significance.

Dependent Variable: Fund Valuation Adjustment

	1(ValAdj)		ValAdj	
	(1)	(2)	(3)	(4)
Insider Ratio	3.63***	5.01***	-0.56	-0.15
	(1.28)	(1.21)	(0.39)	(0.41)
Institution Ratio	-0.03*	-0.00	0.00	0.00
	(0.02)	(0.02)	(0.01)	(0.01)
Log(SuspDays)	0.11***	0.11***	-0.00	-0.00
	(0.02)	(0.02)	(0.00)	(0.00)
Performance		0.30***		-0.15***
		(0.08)		(0.04)
Log(TNA)		-0.00		0.00**
		(0.01)		(0.00)
Log(Age)		0.04***		-0.00*
		(0.01)		(0.00)
FundRetVol		-0.10		-0.13
		(0.33)		(0.12)
Expense Ratio		5.04***		1.15**
		(1.49)		(0.53)
Fund Family Fixed Effects	Y	Y	Y	Y
N	23,035	23,034	23,034	23,033
R^2	0.123	0.129	0.007	0.015

Table IA.2: **Fund Valuation Adjustment and Stock Price Movements at Resumption**

This table reports results from estimating regressions of *ResmRet* on average fund valuation adjustment ($ValAdj$) during suspension. The sample is a subset of suspension events between 2004–2020 where suspension and resumption occur in two different quarters, and at least one fund-reported stock valuation during suspension is observed. Valuation adjustment is measured as the change from the closing price at suspension to fund-reported share value at the last quarter-end prior to resumption, averaged across funds. Market return is measured between suspension date and resumption date (release date). SuspDays is the suspension event's number of trading days. Heteroskedasticity-robust standard errors are reported in parentheses. *, **, *** represent 10%, 5%, and 1% levels of statistical significance.

Dependent Variable: *ResmRet*

	(1)	(2)	(3)
ValAdj	1.067***	0.087	0.095
	(0.107)	(0.108)	(0.106)
Market Return		1.190***	1.187***
		(0.103)	(0.102)
Log(SuspDays)			0.016***
			(0.006)
Intercept	0.058***	0.037***	-0.023
	(0.006)	(0.004)	(0.020)
N	2,966	2,966	2,966
R^2	0.082	0.400	0.402

Table IA.3: **Stock Price Reversals After Trading Resumptions**

This table reports results from estimating regressions of post-resumption stock abnormal return on stock abnormal return at resumption. The dependent variable $PostResmCAR$ is stock cumulative abnormal return over 21 trading days, starting from the first trading day after the resumption day (release day). SuspDays is the suspension event's number of trading days. Earnings Announcement and Other Announcement are the numbers of firm announcements related and unrelated to earnings made during the suspension period. Heteroskedasticity-robust standard errors are reported in parentheses. *, **, *** represent 10%, 5%, and 1% levels of statistical significance.

Dependent Variable: $PostResmCAR$

	Events with MaxWgt $\geq$ 1%		Events with MaxWgt $<$ 1%	
	(1)	(2)	(3)	(4)
ResmAR	-0.01	-0.02	-0.02***	-0.02***
	(0.02)	(0.02)	(0.00)	(0.01)
Log(SuspDays)		-0.01***		-0.01***
		(0.00)		(0.00)
Log(MarketCap)		-0.02***		-0.02***
		(0.00)		(0.00)
Log(Shareholder)		0.00		-0.00
		(0.00)		(0.00)
Book to Market		-0.00		0.02
		(0.02)		(0.01)
Log(EarningsAnn)		0.01		-0.01**
		(0.01)		(0.01)
Log(OtherAnn)		0.00		0.02***
		(0.00)		(0.00)
N	6,486	6,486	9,286	9,286
R^2	0.000	0.018	0.003	0.028

Table IA.4: **Measuring Exposure to Mutual Funds: Robustness Tests**

Panels A–D of this table report results of re-estimating event-level regressions in Tables 7-10, replacing the measure of a stock's exposure to mutual funds $MaxWgt$ with $NFundLargeWgt$, which is the number of mutual funds with at least 3% of portfolio weight in the suspended stock, as observed by investors before trading resumption. Mutual Fund Ownership is the fraction of the firm's equity held by mutual funds, excluding funds in $NFundLargeWgt$, and Institutional Ownership is the fraction held by institutional investors excluding mutual funds. SuspDays is the suspension event's number of trading days. Earnings Announcement and Other Announcement are the numbers of firm announcements related and unrelated to earnings made during the suspension period. Standard errors are clustered at the stock level and reported in parentheses. *, **, *** represent 10%, 5%, and 1% levels of statistical significance.

Panel A, Dependent Variable: Number of Corporate Visits

	All Institutions		Private Funds	
	(1)	(2)	(3)	(4)
NFundLargeWgt	0.15***	0.14***	0.05***	0.05***
	(0.05)	(0.05)	(0.02)	(0.02)
Mutual Fund Ownership	-2.09	-1.36	-1.62	-1.42
	(4.73)	(4.72)	(1.66)	(1.66)
Institutional Ownership	-1.51*	-1.61*	-0.70**	-0.73**
	(0.82)	(0.84)	(0.32)	(0.33)
Log(SuspDays)	0.82***	0.49***	0.22***	0.13**
	(0.10)	(0.16)	(0.03)	(0.06)
Log(MarketCap)	1.33***	1.49***	0.46***	0.51***
	(0.31)	(0.33)	(0.13)	(0.14)
Log(Shareholder)	0.03	-0.00	0.00	-0.01
	(0.22)	(0.22)	(0.08)	(0.08)
Book to Market		2.76***		0.77***
		(0.85)		(0.28)
Log(EarningsAnn)		1.16***		0.30*
		(0.44)		(0.16)
Log(OtherAnn)		0.10		0.03
		(0.25)		(0.09)
Year-Quarter Fixed Effects	Y	Y	Y	Y
City Fixed Effects	Y	Y	Y	Y
Industry Fixed Effects	Y	Y	Y	Y
N	7,558	7,558	7,558	7,558
R^2	0.06	0.06	0.05	0.05

Table IA.4: **Robustness Tests - Continued**

Panel B, Dependent Variable: Internet Search Index

	PC		Mobile Devices	
	(1)	(2)	(3)	(4)
NFundLargeWgt	0.008***	0.008***	0.009***	0.009***
	(0.002)	(0.002)	(0.003)	(0.003)
Mutual Fund Ownership	-0.351	-0.343	-0.863***	-0.864***
	(0.245)	(0.245)	(0.326)	(0.324)
Institutional Ownership	-0.160***	-0.166***	-0.102**	-0.100**
	(0.048)	(0.048)	(0.047)	(0.047)
Log(SuspDays)	0.987***	0.954***	0.980***	0.952***
	(0.007)	(0.010)	(0.006)	(0.010)
Log(MarketCap)	0.245***	0.246***	0.164***	0.159***
	(0.019)	(0.020)	(0.015)	(0.015)
Log(Shareholder)	0.340***	0.338***	0.481***	0.482***
	(0.021)	(0.021)	(0.016)	(0.017)
Book to Market		-0.048		-0.191***
		(0.090)		(0.063)
Log(EarningsAnn)		0.079***		0.078***
		(0.022)		(0.021)
Log(OtherAnn)		0.015		0.001
		(0.011)		(0.011)
Year-Quarter Fixed Effects	Y	Y	Y	Y
Industry Fixed Effects	Y	Y	Y	Y
N	8,762	8,762	7,138	7,138
R^2	0.822	0.823	0.826	0.827

Table IA.4: **Robustness Tests - Continued**

Panel C, Dependent Variable: $|ResmAR|$

	All Suspension Events		Events w/o Price Limits	
	(1)	(2)	(3)	(4)
NFundLargeWgt	0.003***	0.003***	0.005***	0.006***
	(0.001)	(0.001)	(0.001)	(0.001)
$\sigma(AR)$	0.981***	0.913***	0.546*	0.440
	(0.175)	(0.174)	(0.332)	(0.321)
Mutual Fund Ownership	0.283***	0.274***	0.557***	0.540***
	(0.092)	(0.089)	(0.156)	(0.149)
Institutional Ownership	0.083***	0.074***	0.159***	0.146***
	(0.027)	(0.026)	(0.044)	(0.041)
Log(SuspDays)	0.081***	0.033***	0.112***	0.042***
	(0.007)	(0.005)	(0.016)	(0.009)
Log(MarketCap)	-0.089***	-0.085***	-0.129***	-0.120***
	(0.017)	(0.016)	(0.029)	(0.026)
Log(Shareholder)	0.040***	0.036***	0.066***	0.061***
	(0.011)	(0.010)	(0.017)	(0.016)
Book to Market		0.128**		0.192**
		(0.063)		(0.097)
Log(EarningsAnn)		0.173***		0.277***
		(0.033)		(0.054)
Log(OtherAnn)		0.013		-0.005
		(0.014)		(0.031)
Year-Quarter Fixed Effects	Y	Y	Y	Y
Industry Fixed Effects	Y	Y	Y	Y
N	16,191	16,191	8,809	8,809
R^2	0.111	0.131	0.123	0.155

Table IA.4: **Robustness Tests - Continued**

Panel D, Dependent Variable: *SUE*

	ResmRet		*ResmAR*	
	(1)	(2)	(3)	(4)
NFundLargeWgt × PriceMove	0.037**	0.036*	0.047*	0.046*
	(0.019)	(0.019)	(0.026)	(0.026)
PriceMove	0.087**	0.091**	0.096**	0.100***
	(0.035)	(0.035)	(0.038)	(0.039)
NFundLargeWgt	0.005	0.005	0.006*	0.005
	(0.003)	(0.003)	(0.003)	(0.003)
Mutual Fund Ownership	0.884*	0.896*	0.938*	0.949*
	(0.492)	(0.492)	(0.491)	(0.491)
Institutional Ownership	0.134*	0.125	0.137*	0.127*
	(0.077)	(0.077)	(0.077)	(0.077)
Log(SuspDays)	-0.023*	-0.044***	-0.022*	-0.044***
	(0.012)	(0.017)	(0.012)	(0.017)
Log(MarketCap)	0.094***	0.093***	0.090***	0.090***
	(0.029)	(0.029)	(0.029)	(0.029)
Log(Shareholder)	-0.093***	-0.092***	-0.091***	-0.091***
	(0.028)	(0.028)	(0.028)	(0.028)
Book to Market		-0.243***		-0.242***
		(0.079)		(0.079)
Log(EarningsAnn)		0.032		0.034
		(0.043)		(0.043)
Log(OtherAnn)		0.049*		0.051*
		(0.029)		(0.028)
Year-Quarter Fixed Effects	Y	Y	Y	Y
Industry Fixed Effects	Y	Y	Y	Y
N	14,997	14,997	14,997	14,997
R^2	0.035	0.036	0.035	0.036