Corporate site visits, information asymmetry, and disclosure regulation

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Abstract

Using a unique dataset, we study how corporate site visits affect information asymmetry and whether this impact is influenced by the regulation on site visit information disclosure. Starting from 2009, firms listed on the Shenzhen Stock Exchange (SZSE) in China were mandated to disclose site visit information in their financial reports while firms listed on the Shanghai Stock Exchange (SSE) were not required to do so and henceforth usually chose not to disclose. Using adverse selection component of bid-ask spread and dispersion in analysts' forecasts as proxies for information asymmetry of the firms, this paper finds that overall the corporate site visits reduce information asymmetry. However, further examination shows that the negative impact of site visits on information asymmetry is not significantly different between regulated SZSE and unregulated SSE firms. Additionally, we also find a significant market reaction around corporate site visits dates but still it is not statistically different between SZSE and SSE firms. In sum, our paper documents the informational effect of corporate site visits and suggests that the SZSE's regulation on site visit information disclosure is not effective or useful, at least in terms of reducing corporate information asymmetry.

Keywords: Site visits, information asymmetry, disclosure, regulation
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1. Introduction

The prevalence and importance of private interactions between corporate insiders and key outsiders have caused increasing attention from both academics and regulators. Researchers have begun to examine these face-to-face interactions, including conference presentations (e.g. Bushee et al. 2011, 2013; Green et al. 2014a, 2014b), analysts/investor days (Kirk and Markov 2016), private meetings (Stoles 2014; Solomon and Stoles 2015) and site visits (Cheng et al. 2015, 2016), and have provided insightful evidence on the forms and the nature of these interactions and on the impact of private interactions on a firm's information environment. Despite that material information is prohibited to be disclosed during all types of face-to-face interactions, private interactions can still cause regulatory concern that these activities could deteriorate the information gap between the informed and uninformed investors, thereby decreasing the efficiency of capital market. A natural research question is whether there is a need to introduce mandatory disclosure requirement towards private interactions. In this paper, not only do we study the impact of site visits on corporate information asymmetry, but also attempt to contribute to the literature by testing the effectiveness of disclosure regulation on site visits in China.

Specifically, we exploit a unique data set of 20,328 site visits in China in the period from 2009 to 2012 and evaluate the impact of corporate site visits on information asymmetry for Chinese firms with and without mandatory disclosure requirement. In China, firms listed on the Shenzhen Stock Exchange (SZSE) are mandated to disclose the summary information of each site visit in their financial reports starting from 2009,[1] while firms listed on the Shanghai Stock Exchange (SSE) are only required to submit the summary reports to the China Securities Regulatory Committee

[1] "Guidelines on Information Disclosure of Corporate Financial Reports, Document No.1". Available at https://www.szse.cn.

(CSRC) and SSE.[2] Reports to the CSRC and SSE are not publicly available. In this study, we use a private dataset from SSE and hand-collect the site visits information of SSE firms. Combined with information collected from financial reports of SZSE firms, we investigate whether the impact of site visits on information asymmetry varies across the two markets.[3]

The intended objective of the regulation by the SZSE was to provide equal access to firm information.[4] According to SZSE, the mandated disclosure facilitates the transfer of nonmaterial, nonpublic information from those that do site visits to other stakeholders and help analysts and investors market-wide to evaluate the accuracy and creditability of firm information. If equal access is improved via mandated disclosures, then the amount of asymmetry information should be lower under regulatory adoption (Eleswarapu et al., 2001).

Using both adverse selection component of bid-ask spread (Easley and O'Hara, 1987; Glosten and Harris, 1988; Lin et al., 1995) and standard deviation among analyst forecasts as proxies for information asymmetry, we find that site visits reduce the information asymmetry. These results are consistent with the anecdotal evidence that site visits are one of the most important information gathering activities for analysts and investors (e.g. Brown et al., 2015; Bushman et al., 2004). However, we fail to find evidence that the reduction of information asymmetry is significantly different between firms that are mandated to disclose site visits and those that are not mandated to do so. These results are robust to different measures of site visit activities.

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[2] http://www.sse.com.cn/lawandrules/guide/disclosure/dailymemo/c/c_20150912_3986004.shtml.

[3] The dataset used by prior studies on corporate site visits in China (e.g. Cheng, Du, X. Wang, Y. Wang 2015, 2016) only contains site visits to SZSE firms, which is publicly available. Site visits to SHSE firms are not included in their data sample. Literature on site visits in the U.S market is rare because information on site visits is not publicly available in U.S..

[4] http://www.szse.cn/main/investor/fxjy/39748461.shtml.

We also investigate whether disclosure regulation reduces the visiting analysts' and fund managers' private access to information. We repeat our analysis on site visits conducted by analysts and fund managers, respectively. Consistent with our main results, we find that the relation between information asymmetry and visits by analysts or fund managers is neither significantly stronger nor significantly weaker for the regulated market than the unregulated market.

To supplement our investigation, we then analyze the information content of site visits using abnormal absolute market-adjusted returns in the three days around the site visit. We find significant mean increases in abnormal returns during the site visit window. However, the information content reflected in the abnormal returns is not significantly between firms that are mandated to disclose and those that are not. Collectively, these results support our conception that, ceteris paribus, the disclosure regulation on site visits in SZSE is not superior to SSE, a market with no such regulation.

In drawing links to the growing stream of literature on face-to-face interactions between corporate insiders and key capital market participants, we restrict ourselves here to work that is closely in spirit to our study. This work is closely related to Cheng et al. (2015) who analyze the information content of corporate site visits. As the first comprehensive study to investigate the information role of corporate site visits, their paper exploits the mandatory disclosure of site visits regulation of SZSE-listed firms and document significant information content around the event. We extend their research by investigating the effect of corporate site visits on information asymmetry and find a negative information asymmetry impact of site visits. Using dataset on site visits to SZSE firms, Cheng et al. (2016) analyze the effect of site visits on analyst forecast accuracy. They find that the

accuracy of forecasts increases after the site visit. Our paper differs from theirs in that we investigate the impact of site visits on information asymmetry for firms with and without mandatory disclosure requirement. By comparing the information consequence of site visits in the two markets, our paper answers the question that whether such regulation in one market is superior to another one with no mandatory requirement to disclosure.

Our study extends the literature on private interactions. Previous literature documents that private interactions facilitate information transfer from management to analysts and investors, and benefit all participants (e.g. Bushee et al., 2011, 2013; Green et al., 2014a, 2014b; Stoles, 2014). As for site visits, it is found that site visits have significant information content and lead to improved analyst forecast accuracy (Cheng et al., 2015; 2016). Our results demonstrate that the number of site visits is negatively correlated with analyst forecast dispersion and illiquidity ratio, thus confirming the importance of site visits in mitigating the information asymmetry problems. These findings may be important to other markets, specifically for those that are characterized by opaque information environments and relatively weak legal protection. Though capital markets in China and the U.S. differ in several ways, our results might bear reference values for the U.S. market.

Our study also contributes to the literature on regulation of financial reporting and disclosure. By comparing the information asymmetry effect of site visits between regulated and unregulated firms, our paper suggests that the disclosure regulation on site visit information in China in one market is not superior to another one. By highlighting the information impact of different disclosure regulation of two exchanges, our results should also be of interest to regulators.

The rest of the paper proceeds as follows. Section 2 reviews the related literature and develops hypotheses. Section 3 describes the sample and research method. Regression results on all site visits are reported in section 4. Section 5 is the analysis for site visits conducted by analysts and fund managers, respectively. In Section 6, we analyze the information content of site visits. Section 7 presents additional analyses for the endogeneity. Section 8 concludes.

2. Literature Review and Hypothesis Development

2.1 Corporate Site visits and other private interactions

With the growing number of private interactions among managers, employees, analysts, investors and other stakeholders in the last decade and the growing perception among practitioners that analysts and investors value access to management (Kary, 2005; Wagner, 2005), a small but growing stream of literature has begun to examine the information role of private interactions in capital markets (e.g. Bushee et al., 2011, 2013; Cheng et al., 2015, 2016; Green et al., 2014a, 2014b; Kirk and Markov, 2016; Sotles, 2014). On the determinants of private interactions, prior studies indicate that the number of conference presentations and analyst/investor days is positively related to greater demand of analysts and institutional investors for management access to hard-to-value firms (Green et al., 2014a; Kirk and Markov, 2016).

As for the consequences of private interactions, the combined evidence from previous literature suggests that face-to-face interactions facilitate information transfer from management to analysts and investors. For example, Bushee et al. (2011) document a significant information content during conference presentations and find that the physical and social setting of conference influences the market reaction to conference presentation. Bushee et al. (2013) investigate the trade activities

around invitation-only conferences. They find significant increases in trade sizes during the hours of off-line access to investors and after the presentation when the CEO is present. For broker-hosted conferences, Green et al. (2014a) find that broker-hosted conferences benefit all involved parties: investors, firms, brokers, and analysts; Green et al. (2014b) provide evidence that analyst recommendation changes have larger immediate price impacts when the analyst's firm has a conference-hosting relation with the company. Sotles (2014) examines a set of proprietary records compiled by a large-cap NYSE firm and find evidence suggesting that private interaction with management is an important communication channel for analysts for reasons other than firm-specific forecasting news. Regarding analyst/investor days, Kirk and Markov (2016) find that analyst/investor days convey substantial information to the market and when analyst/investor days and conference presentations are hosted in close temporal proximity, analyst/investor days decreases the information content of conference presentations, but not vice versa. Consistent with the notion that private meetings between management and investors increase investors' information advantage, Bushee et al. (2014) find significant larger abnormal market reactions during the road show flight window than other flight windows. Solomon and Soltes (2015) investigate the effect of private meetings on trading activities and report that investors who meet with management trade simultaneously in unusual way and such trades better predict future returns.

Compared with other forms of private interactions, corporate site visits are under-researched mainly because of the lack of data (Sotles 2014; Kirk and Markov 2016). Site visits refer to the visits that analysts and investors pay to firms and is a prevalent and valuable form of information gathering activity in capital market (Brown et al., 2015; Cheng et al., 2015, 2016). Site visits typically contain talks with managers and/or employees, as well as the opportunity to observe the

company's production activities and operation facilities. Compared with other private interactions, site visits are featured of the opportunity to observe the company's operations and production facilities. Therefore, site visits provide a distinctive opportunity for participants to better understand the production process, assembly lines, business culture and employee morale through visual cues (Cheng et al., 2015, 2016).

By exploiting the mandated disclosure requirement of SZSE firms, Cheng et al. (2015) analyze the information content of site visits in China. Their results demonstrate a significant market reaction around corporate site visits dates and suggest that the informativeness of site visits are not likely driven by selective disclosure. Based on the sample of site visits to SZSE firms, Cheng et al. (2016) find that analysts forecast accuracy increases because of site visits and the increased accuracy are greater for manufacturing firms, and firms with more concentrated business lines. In this paper, we extend their research by looking at the impact of site visits on information asymmetry.

In summary, the existing literature suggests that face-to-face interactions plays an important role in shaping the information environment of the company and facilitate the information transfer from insiders to analysts and investors. We therefore conjecture that corporate site visits reduce the information asymmetry in the capital markets. Using dispersion in analysts' forecasts and illiquidity ratio as proxies for information asymmetry of the firms, we propose our first hypothesis as follows:

H1: Site visits reduce the information asymmetry of SZSE and SSE firms.

2.2 Disclosure Regulation

2.2.1 Prior Literature

Regulations have been long shown to be crucial and important in governing financial reporting and disclosure (e.g., Cheng et al., 2016). Prior literature attempts to identify market imperfections that justify the prevalence of disclosure regulations, arguing that the concern that prospective investors free ride on accounting information paid by existing shareholders may lead to the underproduction of information (Lefwich 1980; Watts and Zimmerman 1986; Beaver 1998). As another explanation, Lefwich (1980), Watts and Zimmerman (1986) and Beaver (1998) note that disclosure regulations may driven by regulators' concern about the welfare of financially unsophisticated investors. As a result, the objective of regulations is to reduce the information gap between informed and uninformed.

The effectiveness of disclosure regulation in solving the information and agency problems in capital markets is another important research question in this field. A stream of literature addresses this question by examining the relation between regulated accounting information and security prices. Existing evidence largely supports that regulated financial reports provide new and relevant information to investors (Kothari 2001) and the informativeness of required accounting varies systematically with firm and country characteristics (e.g. Alford et al. 1993; Ball et al. 2000). However, a criticism of this "capital market" research is that it does not compare the relative informativeness of regulated and unregulated financial information. It follows that the existing evidence does not necessarily imply that regulation is superior to a free market approach to disclosure (Healy and Palepu 2001).

Another branch of accounting research examines the effectiveness of disclosure regulation through the information presented under new financial reporting standards. For example, Eleswarapu et al. (2004) investigates the effect of Regulation Fair Disclosure (Reg FD) enacted in 2000, and find that the information asymmetry reflected in trading costs at earnings announcements has declined after Reg FD, especially for smaller and less liquid stocks. Francis et al. (2006) exploit the fact that the Reg FD explicitly excludes Canadian firm listings and firms that trade as American Depository Receipts (ADRs). They construct an industry- and size-matched ADR sample as the control group and examine the relative difference in changes in pre- versus post- information proxies for US versus ADR firms. Their findings show that changes in information environments pre- and post- Reg FD is not significantly different between US firms and ADR firms, suggesting that the effect of Reg FD on information environments of US firms is limited.

In sum, literature on regulation disclosures provides evidence that regulated accounting information is valuable to investors. Regulations are different across countries. It is also possible that firms listed on different exchanges of a country face different regulations. The effectiveness of regulation is largely determined by the characteristics of information environments, and varies systematically with firm and country characteristics.

2.2.2 Disclosure Requirement of Site Visits in China

All firms listed on the Shanghai Stock Exchange (SSE) and Shenzhen Stock Exchange (SZSE) are required to report to the China Securities Regulatory Committee (CSRC) and the SSE/SZSE two working days before site visits.[5] The firm must submit a summary report of site visit to CSRC and

[5] http://www.sse.com.cn/lawandrules/guide/disclosure/dailymemo/c/c_20150912_3986004.shtml.

the SSE/SZSE after a visit is conducted. These reports are not publicly available. In the Article 41 of Guidelines on Information Disclosure issued by CSRC in 2007, which is similar to the Regulation FD in U.S., CSRC prohibits firms to disclose any material information during the site visit and requires firms to refuse site visit requirements in the period temporally proximate to earnings announcements.[6]

Starting from 2009, SZSE requires all listed firms to disclose the summary information of each site visits in their annual reports. The disclosure is mandated and strictly enforced. Firms that fail to disclose site visit information will be publicly denounced by the SZSE. On the contrary, SSE does not require its listed firms to disclose site visit information, and henceforth these firms hardly choose to do so.

The intended purpose of the mandated disclosure, according to SZSE, was to protect the welfare of relatively unsophisticated investors and to provide equal access to firm information.[7] According to SZSE, the mandated disclosure facilitates the transfer of nonmaterial, nonpublic information from those conduct site visits to other stakeholders. As a result, mandatory disclosure of site visit information increases market efficiency by providing all investors greater access to valuable information and by reducing the information gap between the informed and uninformed. If equal access is improved via mandated disclosures, then the amount of information asymmetry in the securities market should be lower under regulatory adoption (Eleswarapu et al., 2004).

In addition, mandatory disclosure of site visit information may help investors to better evaluate

[6] http://www.csrc.gov.cn/pub/newsite/flb/flfg/bmgz/ssl/201012/t20101231_189729.html.
[7] http://www.szse.cn/main/investor/fxjy/39748461.shtml.

the information environment of the company. Ceteris paribus, companies with more site visits are more likely to have greater investor recognition, better investor relationship and better information environment (Firth et al., 2015). The disclosure therefore increases the firm's ability to attract new analysts and investors. Moreover, since research reports by sell-side analysts are free to the public in China, mandatory disclosure of site visit provides information about the frequency of interactions and about the relationship between the research analyst and the company, thereby enabling investors to better assess the accuracy and creditability of analyst forecasts and recommendations.

However, there are several factors that could make the regulation on the disclosure of site visit ineffective. First, similar to other private interactions, site visits potentially carries an information advantage by allowing attendees to ask specific question to elicit "mosaic" information that is valuable only in combination with their private information (Bushee et al., 2011). Prior literature indicates that the audience for a disclosure could affect its information content due to differences in investors' private information, consensus in beliefs, and ability to interpret disclosures (Holthausen and Verrecchia, 1990; Indjejikian, 1991; Kim and Verecchia, 1994). During site visits, visitors could increase the "informedness" of site visits by asking questions related to their private information, and/or confirm or supplement their private information by observing the operations, business units, managers and employees of the company. It follows that the informativeness of the disclosure of site visits depends on the personal information environment of visitors and non-visitors.

Second, site visits feature the opportunity to observe the production facilities and business units.

As a result, site visits are valuable because of this visual access to nonverbal cues through observing the company's production activities and operation facilities (Cheng et al., 2015, 2016). These visual but nonverbal cues include knowledge of production process, corporate cultural and employee morale. However, it is hard to reflect these nonverbal cues in the summary reports to disclosure.

Third, requiring companies to disclose site visits in their annual reports could not provide timely information to investors, especially under the regulation from CSRC that site visits should not be arranged in temporally proximity to earnings announcements. Instead of providing real-time information to non-visiting investors, summary reports in annual reports may simply confirm the information of non-visiting investors that is already available to them through other sources. As a result, disclosures of site visits could have little impact on improving equal access to information.

In summary, the effectiveness of the disclosure of site visits is an empirical question given the two-sided effects of this regulation. Our tests focus on whether the regulation of the disclosure of site visits is superior to a free market approach to disclosure. Thus, we state the null form of our second hypothesis as follows:

$H2_0$: Because of SZSE's disclosure regulation of site visit information, the negative effect of site visit on information asymmetry is more pronounced for SZSE firms than that for SSE firms.

3. Sample and Methodology

3.1 Sample

Our sample consists of 20,328 corporate site visits in the period from 2009 to 2012. As aforementioned, while all listed firms in China are required to submit summary reports of each site visits to the CSRC and SZSE/SSE, only firms listed on the SZSE are mandated to disclose site visit information in their financial reports. For all SZSE listed firms under disclosure regulation, we hand-collect the site visit information from their financial reports. For all SSE listed firms of which the site visit information is not publicly available, we exploit a unique dataset containing the summary reports submitted to the SSE and hand-collect the site visit information for SSE listed firms. Our records of corporate site visit include the name of visiting institutions or individuals, the date, the location and the main topics of discussion during site visits. Data on stock returns, firm characteristics, and analyst forecasts are obtained from the CSMAR database. The high-frequency trade and quote data used to estimate the adverse selection component of bid-ask spread is from GTA. We obtain the data for passenger volume of each province during our sample period from the National Bureau of Statistics of China[8].

[Table 1 is about here]

Table 1 provides summary statistics for our full sample and for the subsample of SZSE and SSE listed firms. As is shown, on average, firms listed on the two markets are not significantly different in their financial characteristics, size, institutional holdings and analyst following. Differences in other factors that influence the information asymmetry are small between two groups. Table 2 presents a correlation table of the control variables.

[8] http://data.stats.gov.cn

[Table 2 is about here]

3.2 Research Design

3.2.1 Regression model for H1

We conduct the following regression to investigate whether corporate site visits reduce information asymmetry of firms in the Chinese market:

$$Info\_Asy_{it} = \alpha + \beta N\_visit_{it} + \sum_{j=1}^{k} \psi_j Control_{jit} + \varepsilon_{it} \quad (1)$$

Where $Info\_Asy_{it}$ is the proxy for information asymmetry of firm *i* in year *t*. We include year and industry fixed effects in the regression and calculate robust standard errors clustered in the firm level to control for possible correlations within the firm. We follow prior literature and construct two proxies for information asymmetry. Our first information asymmetry measure, *AS* or the adverse selection component of the bid-ask spread, is constructed based on the literature on market microstructure. Following Easley and O'Hara (1987), Glosten and Harris (1988), and Lin, Sanger, and Booth (1995), we decompose the bid-ask spread to calculate its adverse selection component using the following structural model:

$$\Delta P_t = c_0 \left(Q_t - Q_{t-1}\right) + c_1 \left(Q_t V_t - Q_{t-1} V_{t-1}\right) + z_0 Q_t + z_1 Q_t V_t + e_t \quad (2)$$

in which *P* is transaction price, *V* is observed number of shares traded on transaction *t*, and *Q* is trade sign which equals 1 for a buyer-initiated transaction and -1 for a seller-initiated transaction. $z_0 + z_1 V^*$ is the adverse selection component of the bid-ask spread, where V^* is the median order size. Our second measure is the standard deviation in the analysts' EPS forecasts, *DISP*. This proxy is scaled by the absolute value of the mean forecast.

N_visit_{it} is the frequency of site visits, calculated as the number of site visits during year *t*. $Control_{j,i,t}$ contain firms' characteristics, financial conditions and other variables that are shown by prior studies to influence information environment of the firm and are measured at the beginning of period. The firm-specific financial variables included are firm size, ROA, leverage, book-to-market, cash, capital expenditure, non-cash working capital, short-term debt, loss indicator, intangible assets and R&D intensity. We include prior returns, standard deviation of returns, beta, and non-tradable shares to describe the capital market characteristics. We also control for other factors shaping the information environment of the firm, including analyst following, institutional ownership, firm age, and an indicator for high tech firms. Finally, we control for whether the company is state own, the separation of control rights and cash-flow rights, and the percentage of shares owned by the largest shareholder as proxies for corporate governance. Appendix A summarizes the definition of all variables.

3.2.2 Regression model for H2

The second purpose of our research is to investigate whether the mandated disclosure of site visits is superior to a free market approach to disclosure. To fulfillment this objective, we use the following regression equation to test if the reduction in information asymmetry is smaller for firms without regulation (i.e. firms listed in SSE):

$$Info\_Asy_{it} = \alpha + \beta N\_visit_{it} + \lambda N\_visit_{it} * If\_Shanghai + \gamma If\_Shanghai + \sum_{j=1}^{k} \psi_j Control_{jit} + \varepsilon_{it} \quad (3)$$

The interaction term, $N\_visit_{it} * If\_shanghai_{it}$, should be significantly positive if the effect of corporate site visits on the reduction of information asymmetry is relatively smaller for firms under free market approach to disclosure. All other variables in (2) are the same to those in (1). Year and industry fixed effects are included and standard errors are clustered at firm level.

4. Results

4.1 Multivariate test for H1

Results from estimation the regression specification in Eq. (1) are reported in Table 3. This table presents the results of changes in the level of information asymmetry to the number of corporate site visits. In the first column, we use the adverse selection component of bid-ask spread based on the market microstructure literature, *AS*, as a proxy for information asymmetry. Higher *AS* indicates greater level of information asymmetry. The result that the coefficient for *N_visist* is negative and significant at the 5% level suggests that the adverse selection component of bid-ask spread is lower for firms with more site visits.

The Second column demonstrates that the *N_visit* has a negative coefficient that statistically significant at the 1% level (-0.0005, t-stat = -3.92), suggesting that more corporate site visits are associated with lower dispersion in analysts' forecasts. This result is consistent with Cheng et al. (2016), who find that site visits facilitate the information gathering of analysts.

Collectively, the results confirm our predication in H1 that investors' site visits reduce the level of information asymmetry of the stock. These findings are in consistent with previous literature in that site visits facilitate the transfer of information from insiders to outsiders (Cheng et al. 2015, 2016). They also confirm the beliefs by practitioners that site visits are an important form of information gathering activities for analysts and investors (e.g. Brown et al. 2015; Bushman et al. 2004).

[Table 3 is about here]

4.2 Multivariate test for H2

Table 4 reports the results for the test of the effectiveness of disclosure regulation. We construct an indicator variable for firms without disclosure regulation (*If_shanghai*). $N\_visit * If\_Shanghai$ captures the conditional effect of the number of site visits on information asymmetry. If the disclosure regulation of site visit information improves the equal access to information, as is expected by the regulator, the coefficient of $N\_visit * If\_Shanghai$, should be significantly positive.

[Table 4 is about here]

Similar to the regression results of Eq. (1), we continue to find that site visits reduce information asymmetry, as firms with more site visits are related to smaller adverse selection component of bid-ask spread and have lower forecast dispersion. However, we fail to find evidence that regulation on the disclosure of site visit information is superior to a free market approach to disclosure – the coefficient of the interaction term between *If_shanghai* and *N_visist* is insignificant, suggesting that the influence of site visits on information asymmetry for firms with a free market approach to disclosure is not significantly different from firms under mandatory disclosure requirement. These results reject the null hypothesis of our H2 and indicate that the mandatory requirement to disclose site visits in financial reports has little impact on reducing the information gap between visitors and non-visitors and on diminishing the level of information asymmetry.

The ineffectiveness of this regulation, as we discussed before, may due to the fact that site visits potentially conveys an information advantage by allowing attendees to acquire "mosaic" information that is valuable only in combination with their private information (Bushee et al., 2011), and to assess visual but nonverbal cues by observing the company's production activities and operation facilities that is impossible to be reflected in the summary reports. Meanwhile, instead of providing real-time information to non-visiting investors, requiring companies to disclose site visits in their annual reports may simply confirm the information of non-visiting investors that is already available to them through other sources.

5. Analysis of site visits by different participants

In this section, we analyze whether the disclosure regulation of site visit information decreases information asymmetry by reducing the institutional investors' and analysts' private access to information. Though all types of stakeholders could visit the company, analysts and institutional investors conduct most of site visits. One reason is that site visits introduce costs to visitors because they must pay for traveling and lodging expenses, spend time visiting the firm and work to collect information. It follows that site visit will be conducted if the expected benefits exceed the costs. For analysts and institutional investors with greater financial ability and more private information, the likelihood of obtaining useful information from site visits is higher.

The mechanism through which site visits reduce information asymmetry is different for fund managers' site visits and analysts'. For site visits by fund managers, they decrease information asymmetry by increasing the liquidity of the stock through trading activities. Analysts' site visits help decrease information asymmetry by updating analysts' prior beliefs about the company and

increasing the precision of analyst reports (Cheng et al., 2016). It follows that the impact of disclosure regulation could vary across site visits by analysts and fund managers. Thus, it is interesting to investigate whether the information asymmetry effect of analysts'/fund managers' site visits differs among regulated and unregulated firms.

5.1 Site Visits by fund managers

Fund managers are financially sophisticated investors. While companies are required to take particular care not to release material information during site visits, fund managers could gather valuable information through site visits. By providing the opportunity to communicate with insiders and to observe production facilities and business units, site visits allow fund managers to confirm and/or update their private information. The increased precision of information helps fund managers to make trading decisions (Cheng et al., 2015). These trading activities contribute to reduce information asymmetry by increasing the liquidity of the stock.

Similar to our analysis on all site visits, we first test whether site visits by fund managers reduces information asymmetry using the following regression:

$$Info\_Asy_{it} = \alpha + \beta N\_fund_{it} + \sum_{j=1}^{k} \psi_j Control_{jit} + \varepsilon_{it} \quad (4)$$

where *N_fund*, is the number of fund managers' site visits during year *t*. All other variables in Eq. (4) are the same as Eq. (1). Year and industry dummies are controlled and standard errors are clustered at firm level. Panel A of Table 5 present the results. In accordance with our prediction, we find that the adverse selection component and forecasts dispersion are smaller for firms with more fund managers' site visits: on average, one more site visit significantly reduces *AS* and *DISP* by 0.0010 and 0.0009, respectively.

[Table 5 is about here]

The objective of disclosure regulation by the SZSE is to reduce the information gap between informed and uninformed. To evaluate whether this purpose if fulfilled by reducing the fund managers' private access to information, we then run the following regression:

$$Info\_Asy_{it} = \alpha + \beta N\_fund_{it} + \lambda N\_fund_{it} * If\_shanghai + \gamma If\_shanghai + \sum_{j=1}^{k} \psi_j Control_{jit} + \varepsilon_{it} \quad (5)$$

Panel B of Table 5 report the results of Eq. (5). Consistent with previous findings, we find that, controlling for other characteristics influencing information asymmetry, firms under disclosure regulation do not experience more reduction in information asymmetry because of site visits conducted by fund managers. The visits by fund managers reduce information asymmetry as the frequency of fund managers' visits is negatively related to analyst forecast dispersion and illiquidity. However, for the purpose of reducing the information gap between visiting fund managers and non-visitors, our results suggest that the disclosure regulation is not superior to a market free approach to disclosure.

5.2 Site Visits by analysts

As the major information intermediary in capital markets, financial analysts collect information from public and private sources, evaluate current performance of firms, make forecasts of future earnings and recommend buy, hold or sell the stock. Existing literature generally supports the role of analysts in helping reducing the information asymmetry between management and outside investors (O'Brien and Bhushan, 1990; Healy and Palepu, 2001). Corporate site visits facilitate analysts to gather information (Brown et al., 2015) and improve their forecast accuracy (Cheng et

al., 2016). As a result, site visits by analysts facilitate to reduce information asymmetry by increasing the accuracy of analyst reports.

To investigate the effect of site visits on information asymmetry and the role of disclosure regulation in reducing the information gap between visiting analysts and other stakeholders, we calculate the frequency of site visits by analysts in each period, *N_analysts*, as the number of analysts' site visits during year t. The two regression equations are as follows:

$$Info\_Asy_{it} = \alpha + \beta N\_analysts_{it} + \sum_{j=1}^{k} \psi_j Control_{jit} + \varepsilon_{it} \quad (6)$$

$$Info\_Asy_{it} = \alpha + \beta N\_analysts_{it} + \lambda N\_analysts_{it} * If\_shanghai + \gamma If\_shanghai + \sum_{j=1}^{k} \psi_j Control_{jit} + \varepsilon_{it} \quad (7)$$

All other variables in Eq. (6) and Eq. (7) are the same as Eq. (1). Year and industry dummies are controlled and standard errors are clustered at firm level.

[Table 6 is about here]

Panel A of Table 6 reports the regression results for Eq. (6). Again, we find that the number of site visits conducted by analysts is negatively associated with adverse selection component of bid-ask spread (*AS*) and forecasts dispersion (*DISP*). These results suggest that site visits by analysts help decrease information asymmetry by facilitating the transfer of information from managers to outside investors. Regression result for Eq. (7) is summarized in Panel B of Table 6. Similar to what is reported by Table 4, we do not find evidence supporting the effectiveness of regulation. Specifically, our results show that the information asymmetry impact of analyst' site visits is not significantly different for regulated and unregulated firms, as the coefficient of the interaction term is insignificant for all information asymmetry measures. Collectively, these findings indicate that

the disclosure regulation on site visits is ineffective in decreasing the visiting analysts' private access to information.

6. Information Content Tests

To bring more robustness to our results, we examine the information content of site visits and retest the effectiveness of regulation by comparing the information content in two markets. We measure the information content of site visits using abnormal absolute returns around the event (e.g. Bushee et al., 2011). We focus on a three-day trading window [-1,+1] around the visit because some are multiple-day events.

We calculate the abnormal absolute return (*ABN_ABSMAR*) as the difference between three-day absolute market-adjusted returns and mean three-day absolute market-adjusted returns in the estimation period [-120, -30], divided by the standard deviation of the mean absolute market-adjusted returns in the estimation period (Markov and Kirk, 2016). We also calculate the *ABN_ABSMAR* for visits conducted by analysts and fund managers, respectively.

[Table 7 is about here]

Panel A of Table 7 reports mean, median, and percentage of positive *ABN_ABSMAR* around site visits of both markets. For all site visits, we document a significant spike in *ABN_ABSMAR* during the visit window. The mean *ABN_ABSMAR* of 0.095 during the site visit window represents a 13 percent increase over the estimation period abnormal returns, suggesting that site visits conveys information. The mean *ABN_ABSMAR* for site visit conducted by analysts and fund managers are

0.134 and 0.095, respectively, and of statistical significance. The median *ABN_ABSMAR*s are negative because only about 40% of the firms experience greater absolute returns during the site visit window.

In this regard we relate our research to Bushee et al. (2011), who analyze the information role of conference presentations and document a similar great deal of cross-sectional variation. They argue that the small magnitude of these mean effects and significantly negative median imply that firms generally do not disclose new information during the event, the information content stems from the private information of visitors.

Panel B of Table 7 compares the information content of site visits between firms with regulation (*if_shanghai* = 0) and firms with a free market approach to disclosure (*if_shanghai* = 1). For all site visits, the mean *ABN_ABSMAR* for the regulated is 0.102 while the mean abnormal return for the unregulated is 0.073. The difference in absolute abnormal returns between the regulated and unregulated is insignificant, suggesting that the information content is not improved because of mandated disclosure of site visit information. The medians are negative because only 39%-40% of firms experience positive abnormal returns around site visits. Results for site visits conducted by analysts and fund managers are similar.

These results are in consistent with our argument that regulation could be ineffective if the informativeness of site visits is closely related to the private information of the attendees (Cheng et al. 2016), because private information affects the degree to which visitors can update their prior beliefs about the company with information signals obtained through site visits. The results that

the information content reflected in the abnormal absolute returns is not significantly between regulated and unregulated support our conception that the disclosure regulation on site visits could be ineffective because the "mosaic" information transferred during site visits may only be valuable in combination of the participants' private information.

7. Endogeneity between dispersion in analysts' forecast and site visits

In the main test, we investigate whether site visits lead to lower dispersion in analysts' forecasts (*DISP*) and compare the effect of site visit on *DISP* between regulated and unregulated markets. However, the decision to visit a firm may be endogenous – analysts may be more likely to conduct site visits to firms with higher dispersion of analysts' forecasts, leading to a positive association between whether a firm receives site visits and dispersion in analysts' forecasts. This endogenous concern is less important for adverse selection component of bid-ask spread, which is our first measure of information asymmetry.

To address this possible endogenous problem, we retest our hypotheses via Heckman two-stage selection model. We consider an endogenous indication variable, *D_visit*, which equals 1 if the firm receives at least one site visit during the year, and 0 otherwise. The exclusion restriction in our model is the logarithm of the annual passenger volume of the province where the headquarter of the company locates (*Log Passenger Volume*). We obtain the data from the National Bureau of Statistics of China. Usually, transportation to and in provinces with higher passenger volume is more convenient. As transportation convenience affects visiting costs as time and comfort, we expect that companies located in provinces with higher passenger volume are more likely to receive site visit. The probability of receiving site visits is thus predicted to be positively associated with *Log Passenger Volume*. At the same time, there is little evidence that *Log Passenger Volume*

has direct impact on the dispersion in analysts' forecasts.

Table 8 presents the results for the Heckman selection model. In stage one, we estimate the choice of whether to visit a firm using *Log Passenger Volume* and other control variables in Eq. (1) using probit. Regression results for the first stage are presented in the first column of Table 8. Consistent with our prediction, the coefficient of *Log Passenger Volume* is positive and of statistical significance. In stage two, we add the inverse Mills' ratio to control for the selection bias.

[Table 8 is about here]

Results of the second state are summarized in the second and third column of Table 8. Column (2) tests whether the negative effect of site visits on forecast dispersion persists after controlling for the endogeneity concern. The coefficient on endogeneity choice variable, *D_visit*, is -0.0140 and significant, suggesting that site visits help to reduce dispersion in analysts' forecasts. In Column (3), we examine whether the disclosure regulation by SSE influence the negative effect of site visits. Similar to our previous findings, we find that though firms receiving at least one site visit have significantly lower forecast dispersion, this effect is not significantly different between the regulated SZSE firms and the unregulated SSE firms. Note that the coefficient on the inverse Mills; ratio is not significant in both tests, suggesting that selection problem is not a significant concern for our investigation.

8. Conclusion

In this paper, we examine two research questions: 1) whether corporate site visits reduce the

information asymmetry; and 2) whether the information asymmetry effect of corporate site visits is enhanced by the disclosure regulation on site visit information. In China, companies listed on the SZSE are required to disclose to the public their summary information of each site visits in their financial reports while firms listed on the SSE are only required to provide summary reports to the SSE and CSRC but not the public. Compared with prior studies on site visits in China (e.g. Cheng et al., 2015, 2016), our study exploits an extended sample by including a set of proprietary site visit records compiled by SSE firms.

Using a sample of 20,328 site visits in the period from 2009 to 2012, we find that the information asymmetry is negatively correlated with corporate site visits. These findings are consistent with the notion that site visit is an important type of information acquisition activities (e.g. Bushman et al., 2004; Cheng et al., 2015). However, our results show that the mandatory disclosure requirement by SZSE has no significant impact on the negative effect of site visits on information asymmetry, as the reductions are not significantly different between the regulated SZSE and unregulated SSE. These results are robust to different measures of site visit activities. We also investigate the information content of site visits and document a significant mean abnormal return reaction to site visits. The abnormal returns around site visits, however, are not significant between SZSE and SSE firms.

These findings contribute to the literature by documenting how corporate site visits affect the information asymmetry and how disclosure regulation of site visit information influences this impact. In this regard we relate our study to a growing stream of literature that investigates the role of private interactions between firm insiders and outsiders as a disclosure channel and a source of

information (e.g. Bushee et al., 2011; Cheng et al., 2016; Green et al., 2014b). Our investigation of corporate site visits extends the literature by showing that corporate site visits reduce information asymmetry. In addition, the exploitation of the proprietary site visit records compiled by SSE firms provides a distinctive opportunity to compare the information asymmetry effect of site visits between the regulated SZSE and unregulated SSE. Our findings suggest that this disclosure regulation by SZSE is ineffective in reducing information asymmetry, which could be of interest to regulators.

Appendix A Variable Definitions

Variables	Definitions
DISP	Dispersion in analysts' forecast, are measured by the standard deviation in the analysts' EPS forecasts. This proxy is scale adjusted by the absolute value of the mean forecast.
AS	The adverse selection component of the bid-ask spread estimated using high frequency trading data. Following Easley and O'Hara (1987), Glosten and Harris (1988), and Lin, Sanger, and Booth (1995), we decompose the bid-ask spread to calculate its adverse selection component using the following structural model: $\Delta P_t = c_0 (Q_t - Q_{t-1}) + c_1 (Q_t V_t - Q_{t-1} V_{t-1}) + z_0 Q_t + z_1 Q_t V_t + e_t$ in which *P* is transaction price, *V* is observed number of shares traded on transaction *t*, and *Q* is trade sign which equals 1 for a buyer-initiated transaction and -1 for a seller-initiated transaction. $z_0 + z_1 V^*$ is the adverse selection component of the bid-ask spread, where V^* is the median order size.
ABN_ABSMAR	The three-day absolute market-adjusted returns less the mean three-day absolute market-adjusted returns from the estimation period [-120,-30], divided by the standard deviation of the mean absolute market-adjusted returns from the same estimation period.
N_visit	The number of site visits during a year.
If_shanghai	1 if the firm is listed in SSE. Firms listed in SSE are not required to disclose site visit information in their annual reports.
N_analysts	The number of analysts' site visits during a year.
N_fund	The number of fund managers' site visits during a year.
Log Size	The logarithm of total assets.
ROA	Earnings before extraordinary items divided by total assets at the end of period.
Leverage	Long-term debt plus long-term debt in current liabilities scaled by total assets at the end of period.
Log Age	The logarithm of the number of years since the foundation of the firm.
Book-to-Market	Book value of equity divided by market value of equity.
CASH	The item of cash scaled by the total assets.
Capital Expenditure	Cash paid to acquire fixed-assets, construction-in-process, intangible

	assets, and other long-term assets minus proceeds from disposal of fixed assets, divided by total assets.
Non-cash Working Capital	Short-term assets minus current liabilities minus cash, scaled by total assets.
Short-term Debt	The item of Short-term debt scaled by total asset.
Log Analyst Following	The logarithm of one plus the number of following analysts. Assumed to be 0 for ant period in which the company is listed on an exchange, but no data are available on the CSMAR's analyst dataset.
Loss	1 if the fiscal quarters' net income before extraordinary items is negative, and 0 otherwise.
Intangibles	Recognized intangibles plus goodwill scaled by total assets.
R&D intensity	Research and development expenses divided by total assets. Following Koh and Reeb (2015), we replace missing values with the industry median of R&D intensity for the same period, if the latter is also missing, we then set R&D intensity to 0.
Institutional Holdings	The percentage of shares held by institutional investors. Assumed to be 0 for any period in which the company is listed on an exchange, but no date is available in the institutional ownership dataset.
Prior Returns	Market-adjusted buy-and-hold returns over a year period at the prior fiscal year-end, with a minimum of 50 trading days.
Std. Dev. of Returns	Standard deviation of daily returns over a year period at the prior fiscal year-end, with a minimum of 50 trading days.
Beta	Beta value calculated using the CAPM.
Non-tradable Shares	The percentage of shares that are prohibited to trade in the market to the total shares outstanding.
High Tech	1 if the firm belongs to one of the following industry code: C51 and C55 (drugs and biology); K40 (R&D services); G50 and G60 (programing), G10 (computers), or G01 and G20 (electronics).
State owned	1 if the firm is state-owned.
Separation	The separation of control rights and cash-flow rights.
Largest Shareholder Holdings	The percentage of shares held by the largest shareholder.
Log Passenger Volume	The logarithm of annual passenger volume of the province where the company's headquarter locates.

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Table 1 Summary Statistics

	All Sample Firms			Firms listed in SZSE (*If_shanghai* = 0)			Firms listed in SSE (*If_shanghai* = 1)		
Variable	N	MEAN	STD	N	MEAN	STD	N	MEAN	STD
Information Asymmetry Measures									
DISP	4,939	0.1367	0.1735	2,708	0.1439	0.1695	2,231	0.1279	0.1780
AS	4,939	0.0827	0.2769	2,708	0.1151	0.3325	2,231	0.0469	0.1921
Site Visits Variables									
N_visit	4,939	5.4780	16.3701	2,708	6.7492	18.4418	2,231	4.0780	13.5975
N_fund	4,939	2.6154	8.9973	2,708	3.1901	9.9940	2,231	1.9825	7.7048
N_analysts	4,939	2.0126	6.0660	2,708	2.6039	7.1940	2,231	1.3613	4.4187
Control Variables									
Log Size	4,939	21.7620	1.4868	2,708	21.4114	1.1901	2,231	22.1148	1.6620
ROA	4,939	0.0381	0.0445	2,708	0.0397	0.1304	2,231	0.0334	0.4232
Leverage	4,939	0.0951	0.1635	2,708	0.0754	0.1597	2,231	0.1156	0.1648
Log Age	4,939	2.4970	0.4824	2,708	2.3977	0.5301	2,231	2.6063	0.3960
Book-to-Market	4,939	0.4011	0.4895	2,708	0.3687	0.2921	2,231	0.4336	0.6267
CASH	4,939	0.1999	0.1602	2,708	0.2347	0.1804	2,231	0.1650	0.1277
Capital Expenditure	4,939	0.0570	0.0755	2,708	0.0644	0.0662	2,231	0.0495	0.0832
Non-Cash Working Capital	4,939	-0.1358	2.6316	2,708	-0.1472	3.6369	2,231	-0.1242	0.6668
Short-term Debt	4,939	0.4849	2.6275	2,708	0.5004	3.6340	2,231	0.4690	0.6504
Log Analyst Following	4,939	1.9957	0.8623	2,708	1.9947	0.8333	2,231	1.9970	0.8956
Loss	4,939	0.1044	0.3058	2,708	0.0932	0.2908	2,231	0.1157	0.3199
Intangibles	4,939	0.0545	0.0717	2,708	0.0538	0.0634	2,231	0.0553	0.0793
R&D Intensity	4,939	0.0991	3.8129	2,708	0.1516	5.2396	2,231	0.0403	0.2262
Institutional Holdings	4,939	0.3321	0.2323	2,708	0.3004	0.2302	2,231	0.3640	0.2302
Prior Returns	4,939	1.1884	0.9363	2,708	1.2102	0.9676	2,231	1.1665	0.9034
Std. Dev. Of Returns	4,939	0.0351	0.0362	2,708	0.0374	0.0482	2,231	0.0329	0.0175
Beta	4,939	1.0012	0.2036	2,708	1.0206	0.2085	2,231	0.9826	0.1970
Non-Tradable Shares	4,939	0.3045	0.2802	2,708	0.3810	0.2883	2,231	0.2276	0.2491
HighTech	4,939	0.0419	0.2004	2,708	0.0568	0.2314	2,231	0.0255	0.1577
State owned	4,939	0.0430	0.2029	2,708	0.0377	0.1905	2,231	0.0489	0.2158
Separation	4,939	5.8110	8.2653	2,708	6.0024	8.3073	2,231	5.5966	8.2139
Largest Shareholder Holdings	4,939	0.3662	0.1593	2,708	0.3615	0.1533	2,231	0.3714	0.1655

Table 1 presents the summary statistics of variables. See Appendix A for Variable Definitions. Information Asymmetry measures the adverse selection component of bid-ask spread *AS* (Easley and O'Hara 1987; Glosten and Harris 1988; Lin et al. 1995) and the standard deviation of earnings forecasts made by analysts one month prior to the year end (scaled by the absolute mean), *DISP*. *N_visit*, *N_fund*, and *N_annalysts* are the total number of site visits, visits conducted by fund and visits by analysts in each year, respectively. *If_*shanghai is an indicator variable that equals to 1 if the firm is listed in SSE and 0 otherwise. Firms listed in SSE (*If_shanghai* = 1) are not regulated to disclose site visit information, while firms listed in SZSE (*If_shanghai* = 0) are required to disclose site visit information. Definitions of all variables are summarized in Appendix A.

Table 2 Correlations

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1.Log Size	1.0000											
2.ROA	-0.0890*	1.0000										
3.Leverage	0.2737*	-0.0073	1.0000									
4.Log Age	0.0177	-0.0015	0.1321*	1.0000								
5.Book-to-Market	0.3870*	-0.0098	0.0318*	-0.0166	1.0000							
6.CASH	-0.1599*	0.0607*	-0.2570*	-0.2640*	-0.0922*	1.0000						
7.Capital Expenditure	0.1293*	-0.0035	0.1178*	-0.1915*	0.0689*	-0.0570*	1.0000					
8.Non-Cash Working Capital	0.1709*	-0.6624*	-0.0429*	-0.0278*	0.1444*	-0.0408*	0.0436*	1.0000				
9.Short-term Debt	-0.1743*	0.6618*	0.0315*	0.0288*	-0.1497*	0.0276*	-0.0655*	-0.9974*	1.0000			
10.Log Analyst Following	0.4547*	0.0520*	0.0179	-0.1623*	0.0262	0.0900*	0.1992*	0.0222	-0.0314*	1.0000		
11.Loss	-0.1725*	-0.0045	0.0691*	0.1036*	-0.0942*	-0.1718*	-0.1077*	-0.0759*	0.0738*	-0.1958*	1.0000	
12.Intangibles	-0.0812*	-0.0094	0.0314*	0.0647*	-0.0468*	-0.1399*	0.0490*	-0.0024	-0.0135	0.0039	0.0724*	1.0000
13.R&D Intensity	-0.1341*	-0.8919*	-0.0023	0.0039	-0.0290*	0.0442*	-0.0212	-0.9357*	0.9358*	-0.0255	0.0540*	-0.0109
14.Institutional Holdings	0.2762*	-0.0170	0.0279*	0.0589*	-0.0397*	-0.0210	0.0841*	0.0378*	-0.0401*	0.3808*	-0.1412*	-0.0188
15.Prior Returns	-0.0697*	-0.0032	-0.0123	-0.0089	-0.2320*	0.0439*	-0.0451*	-0.0113	0.0125	0.0448*	-0.0328*	0.0032
16.Std. Dev. Of Returns	-0.0784*	0.0015	0.0062	-0.0710*	-0.0332*	0.0363*	0.0057	-0.0042	0.0084	-0.0729*	0.0003	-0.0143
17.Beta	-0.1241*	0.0468*	-0.0160	0.0073	-0.0143	-0.0044	0.0515*	0.0811*	-0.0729*	-0.2578*	-0.0504*	-0.0519*
18.Non-Tradable Shares	-0.0498*	0.0176	-0.0779*	-0.4278*	-0.0149	0.3235*	0.1225*	-0.0130	0.0131	0.0481*	-0.0819*	-0.0444*
19.HighTech	-0.0750*	-0.0025	-0.0361*	-0.0655*	-0.0060	0.0338*	0.0546*	0.0105	-0.0112	-0.0339*	0.0113	-0.0389*
20.State owned	0.0622*	-0.0027	-0.0011	-0.0145	0.0764*	-0.0446*	-0.0061	0.0037	-0.0046	0.0298*	0.0239	-0.0249
21.Separation	-0.0106	-0.0089	-0.0155	0.0535*	-0.0194	-0.0115	-0.0097	0.0048	-0.0031	0.0104	-0.0325*	-0.0126
22.Largest Shareholder Holdings	0.2389*	-0.0079	0.0391*	-0.2106*	0.0874*	0.0422*	0.0544*	0.0180	-0.0186	0.1237*	-0.1027*	-0.0707*

	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)		
13.R&D Intensity	1.0000											
14.Institutional Holdings	-0.0265	1.0000										
15.Prior Returns	0.0084	0.0543*	1.0000									
16.Std. Dev. Of Returns	0.0113	-0.1432*	0.3204*	1.0000								
17.Beta	-0.0585*	-0.1416*	0.1091*	0.3693*	1.0000							
18.Non-Tradable Shares	0.0195	-0.4610*	-0.0212	0.1846*	-0.0280*	1.0000						

19.HighTech	-0.0024	-0.0036	0.0169	0.0138	0.0643*	0.0008	1.0000			
20.State owned	-0.0037	0.0521*	-0.0057	-0.0028	-0.0436*	-0.0405*	-0.0200	1.0000		
21.Separation	-0.0125	0.0918*	0.0179	0.0134	0.0381*	-0.0255*	-0.0225	0.0119	1.0000	
22.Largest Shareholder Holdings	-0.0128	0.1533*	0.0084	0.0548*	-0.0527*	0.3040*	-0.0497*	0.0321*	0.1144*	1.0000

Table 2 presents Pearson correlations. * indicates statistical significance at the 5 percent level in a two-tailed test. The sample includes 20,328 site visits and 4,939 observations. See Appendix for Variable Definitions.

Table 3 Information Asymmetry and Number of Site Visits

VARIABLES	(1) AS	(2) DISP
N_visit	-0.0005**	-0.0005***
	(-2.54)	(-3.92)
Log Size	-0.0624***	0.0134**
	(-8.57)	(2.14)
ROA	-0.0420**	0.4427***
	(-2.00)	(5.12)
Leverage	0.0634	0.1317***
	(1.23)	(3.30)
Log Age	-0.0064	0.0039
	(-0.33)	(0.46)
Book-to-Market	0.0589**	-0.0093
	(2.50)	(-0.46)
CASH	0.1321**	0.0874***
	(2.25)	(2.67)
Capital Expenditure	-0.0938	0.1036**
	(-0.94)	(2.15)
Non-Cash Working Capital	0.0571	-0.0092
	(1.58)	(-0.30)
Short-term Debt	0.0834**	0.0711**
	(2.04)	(2.42)
Log Analyst Following	0.0190**	0.0097
	(2.20)	(1.60)
Loss	-0.0056	0.0919***
	(-0.26)	(3.49)
Intangibles	-0.0053	-0.0517
	(-0.09)	(-1.26)
R&D Intensity	-0.0246	0.0411
	(-1.36)	(0.65)
Institutional Holdings	0.1570***	0.0560***
	(4.10)	(2.95)
Prior Returns	0.0086	0.0297***
	(0.86)	(4.74)
Std. Dev. Of Returns	0.1493	-0.1951***

	(0.80)	(-3.10)
Beta	-0.0976***	-0.0058
	(-2.73)	(-0.34)
Non-Tradable Shares	0.1243***	0.0744***
	(3.72)	(4.36)
HighTech	-0.0317	-0.0029
	(-1.14)	(-0.19)
State owned	0.0104	0.0002
	(0.43)	(0.01)
Separation	0.0001	0.0005
	(0.12)	(1.13)
Largest Shareholder Holdings	0.0235	-0.0716***
Constant	1.3405***	-0.3613***
	(8.46)	(-2.71)
Year dummies	YES	YES
Industry dummies	YES	YES
Observations	4,939	4,939
R Squared	0.1176	0.1602

This table presents the results for the following regression:

$$Info\_Asy_{i,t} = \alpha + \beta N\_visit_{it} + \sum_{j=1}^{k} \psi_j Control_{j,i,t} + \varepsilon_{i,t}$$

The dependent variable is the proxy for information asymmetry. We follow prior literature and use two variables to measure the level of information asymmetry of the stock: the adverse selection component of bid-ask spread *AS* (Easley and O'Hara 1987; Glosten and Harris 1988; Lin et al. 1995) and the standard deviation of earnings forecasts made by analysts one month prior to the year end (scaled by the absolute mean), *DISP*. *N_visit* is the total number of site visits in each year. $Control_{j,i,t-1}$ are control variables measured at the beginning of period. Definitions of all variables are summarized in Appendix A. Year and industry fixed effect are included. Standard errors are clustered at firm level. t-statistics in parentheses. ***, **, and * indicates significance level of 1%, 5% and 10%, respectively.

Table 4 Information Asymmetry, Site Visits, and Disclosure Regulation

VARIABLES	(1) AS	(2) DISP
N_visit	-0.0009***	-0.0008***
	(-2.90)	(-4.18)
N_visit*if_shanghai	0.0002	0.0004
	(0.49)	(1.23)
If_shanghai	-0.0617***	-0.0258***
	(-4.65)	(-2.60)
Log Size	-0.0544***	0.0147**
	(-6.70)	(2.37)
ROA	-0.0377**	0.3969***
	(-2.13)	(4.69)
Leverage	0.1073**	0.1369***
	(2.18)	(3.62)
Log Age	-0.0024	0.0076
	(-0.12)	(0.88)
Book-to-Market	0.0500*	-0.0082
	(1.95)	(-0.38)
CASH	0.1059*	0.0945***
	(1.75)	(2.81)
Capital Expenditure	-0.1424	0.0856*
	(-1.46)	(1.75)
Non-Cash Working Capital	0.0284	-0.0052
	(0.77)	(-0.15)
Short-term Debt	0.0582	0.0794**
	(1.40)	(2.52)
Log Analyst Following	0.0177*	0.0119**
	(1.95)	(2.08)
Loss	0.0060	0.0810***
	(0.26)	(3.23)
Intangibles	0.0013	-0.0544
	(0.02)	(-1.31)
R&D Intensity	-0.0252	0.0267
	(-1.38)	(0.53)
Institutional Holdings	0.1530***	0.0613***
	(4.00)	(3.15)

Prior Returns	0.0099	0.0287***
	(0.95)	(4.47)
Std. Dev. Of Returns	0.1135	-0.1578**
	(0.61)	(-2.51)
Beta	-0.0972***	-0.0272
	(-2.60)	(-1.52)
Non-Tradable Shares	0.1003***	0.0649***
	(2.88)	(3.58)
HighTech	-0.0513	0.0055
	(-1.58)	(0.17)
State owned	0.0139	-0.0082
	(0.59)	(-0.39)
Separation	-0.0001	0.0005
	(-0.20)	(1.30)
Largest Shareholder Holdings	0.0243	-0.0796***
	(0.52)	(-3.06)
Constant	1.2105***	-0.3631***
	(6.82)	(-2.77)
Year dummies	YES	YES
Industry dummies	YES	YES
Observations	4,939	4,939
R Squared	0.1235	0.1637

This table presents the results for the following regression:

$$Info\_Asy_{i,t} = \alpha + \beta N\_visit_{it} + \lambda N\_visit_{it} * If\_shanghai_{it} + \gamma If\_shanghai_{it} + \sum_{j=1}^{k} \psi_j Control_{j,i,t} + \varepsilon_{i,t}$$

The dependent variable is the proxy for information asymmetry. We follow prior literature and use two variables to measure the level of information asymmetry of the stock: the adverse selection component of bid-ask spread *AS* (Easley and O'Hara 1987; Glosten and Harris 1988; Lin et al. 1995) and the standard deviation of earnings forecasts made by analysts one month prior to the year end (scaled by the absolute mean), *DISP*. *N_visit* is the total number of site visits in each year. *If_*shanghai is an indicator variable that equals to 1 if the firm is listed in SSE and 0 otherwise. Firms listed in SSE (*If_shanghai* = 1) are not regulated to disclose site visit information, while firms listed in SZSE (*If_shanghai* = 0) are required to disclose site visit information. $Control_{j,i,t-1}$ are control variables measured at the beginning of period. Definitions of all variables are summarized in Appendix A. Year and industry fixed effect are included. Standard errors are clustered at firm level. t-statistics in parentheses. ***, **, and * indicates significance level of 1%, 5% and 10%, respectively.

Table 5 Information Asymmetry, Site Visits by Fund and Disclosure Regulation

Panel A: Information Asymmetry and Site Visits by Fund		
	(1)	(2)
VARIABLES	AS	DISP
N_fund	-0.0010***	-0.0009***
	(-2.60)	(-4.12)
Control Variables	YES	YES
Year dummies	YES	YES
Industry dummies	YES	YES
Observations	4,939	4,939
R Squared	0.1217	0.1607

Panel B: Information Asymmetry, Site Visits by Fund and Disclosure Regulation		
	(1)	(2)
VARIABLES	AS	DISP
N_fund	-0.0014**	-0.0013***
	(-2.36)	(-3.83)
N_fund*if_shanghai	-0.0001	0.0004
	(-0.20)	(0.92)
If_shanghai	-0.0574***	-0.0229**
	(-4.52)	(-2.37)
Control Variables	YES	YES
Year dummies	YES	YES
Industry dummies	YES	YES
Observations	4,939	4,939
R Squared	0.1233	0.1631

Panel A of this table presents the results for the following regression:

$$Info\_Asy_{i,t} = \alpha + \beta N\_fund_{it} + \sum_{j=1}^{k} \psi_j Control_{j,i,t} + \varepsilon_{i,t} \ ,$$

and Panel B presents the results for the following regression:

$$Info\_Asy_{i,t} = \alpha + \beta N\_fund_{it} + \lambda N\_fund_{it} * If\_shanghai_{it} + \gamma If\_shanghai_{it} + \sum_{j=1}^{k} \psi_j Control_{j,i,t} + \varepsilon_{i,t}$$

The dependent variable is the proxy for information asymmetry. We follow prior literature and use two variables to measure the level of information asymmetry of the stock: the adverse selection component of bid-ask spread *AS* (Easley and O'Hara 1987; Glosten and Harris 1988; Lin et al. 1995) and the standard deviation of earnings forecasts made by analysts one month prior to the year end (scaled by the absolute mean), *DISP*. *N_fund* is the total number of site visits by fund in each year. *If*_shanghai is an indicator variable that equals to 1 if the firm is listed in SSE and 0 otherwise. Firms listed in SSE (*If_shanghai* = 1) are not regulated to disclose site visit information, while firms listed in SZSE (*If_shanghai* = 0) are required to disclose site visit information. $Control_{j,i,t-1}$ are control variables measured at the beginning of period. Definitions of all variables are summarized in Appendix A. Year and industry fixed effect are included. Standard errors are clustered at firm level. t-statistics in parentheses. ***, **, and * indicates significance level of 1%, 5% and 10%, respectively.

Table 6 Information Asymmetry, Site Visits by Analysts and Disclosure Regulation

Panel A: Information Asymmetry and Site Visits by Analysts		
	(1)	(2)
VARIABLES	AS	DISP
N_analysts	-0.0015***	-0.0012***
	(-2.73)	(-2.87)
Control Variables	YES	YES
Year dummies	YES	YES
Industry dummies	YES	YES
Observations	4,939	4,939
R Squared	0.1224	0.1623

Panel B: Information Asymmetry, Site Visits by Analysts and Disclosure Regulation		
	(1)	(2)
VARIABLES	AS	DISP
N_analysts	-0.0027***	-0.0020***
	(-3.39)	(-3.37)
N_analysts*If_Shanghai	0.0008	0.0009
	(0.75)	(1.03)
If_shanghai	-0.0637***	-0.0261***
	(-4.76)	(-2.58)
Control Variables	YES	YES
Year dummies	YES	YES
Industry dummies	YES	YES
Observations	4,939	4,939
R Squared	0.1238	0.1628

Panel A of this table presents the results for the following regression:

$$Info\_Asy_{i,t} = \alpha + \beta N\_analysts_{it} + \sum_{j=1}^{k} \psi_j Control_{j,i,t} + \varepsilon_{i,t} \ ,$$

and Panel B presents the results for the following regression:

$$Info\_Asy_{i,t} = \alpha + \beta N\_analysts_{it} + \lambda N\_analysts_{it} * If\_shanghai_{it} + \gamma If\_shanghai_{it} + \sum_{j=1}^{k} \psi_j Control_{j,i,t} + \varepsilon_{i,t}$$

The dependent variable is the proxy for information asymmetry. We follow prior literature and use two variables to measure the level of information asymmetry of the stock: the adverse selection component of bid-ask spread *AS* (Easley and O'Hara 1987; Glosten and Harris 1988; Lin et al. 1995) and the standard deviation of earnings forecasts made by analysts one month prior to the year end (scaled by the absolute mean), *DISP*. *N_analysts* is the total number of site visits by analysts in each year. *If_*shanghai is an indicator variable that equals to 1 if the firm is listed in SSE and 0 otherwise. Firms listed in SSE (*If_shanghai* = 1) are not regulated to disclose site visit information, while firms listed in SZSE (*If_shanghai* = 0) are required to disclose site visit information. $Control_{j,i,t-1}$ are control variables measured at the beginning of period. Definitions of all variables are summarized in Appendix A. Year and industry fixed effect are included. Standard errors are clustered at firm level. t-statistics in parentheses. ***, **, and * indicates significance level of 1%, 5% and 10%, respectively.

Table 7 Information Content of Site Visits

Panel A : Information Content of Site Visits for All Firms

	Abnormal Market-adjusted Return during [-1,+1]					
	Mean		Median		Pct>0	N
All site visits	0.095	***	-0.252	***	40.03%	20328
Visits by analysts	0.135	***	-0.400	***	40.03%	11316
Visits by fund	0.095		-0.240	***	40.15%	10054

Panel B : Information Content of Site Visits for Regulated and Unregulated

		Abnormal Market-adjusted Return during [-1,+1]					
	If_shanghai	Mean		Median		Pct>0	N
All site visits	0	0.102	***	-0.254	***	40.08%	15193
	1	0.074	***	-0.247	***	39.86%	5135
	Difference	0.028		-0.007			
Visits by analysts	0	0.140	***	-0.396	***	39.66%	7978
	1	0.123	**	-0.403	***	40.92%	3338
	Difference	0.017		0.008			
Visits by fund	0	0.093	***	-0.244	***	40.03%	6912
	1	0.101	***	-0.228	***	40.42%	3142
	Difference	-0.008		-0.017			

This table provides mean, medians and percentage of positive values of stock market reaction during the three-day event window around site visits. Day 0 is the event date. *Absolute market-adjusted abnormal return during [-1,+1]* is defined as the absolute value of three-day market-adjusted returns less the mean absolute value of three-day market-adjusted returns during the estimation period. The estimation period begins 120 days prior to the site visit and ends 30 days prior to the event. ***, **, and * indicates significance level of 1%, 5% and 10%, respectively, using a two-tailed tests (mean) and a Wilcoxon signed rank test (medians).

Table 8 Endogeneity Test

VARIABLES	D_visit	DISP	DISP
D_visit		-0.0140*	-0.0323**
		(-1.69)	(-2.47)
D_visit*If_Shanghai			0.0239
			(1.47)
If_Shanghai			-0.0325***
			(-3.11)
Log Passenger Volume	0.0566*		
	(1.78)		
		-0.0110	-0.0139
Inverse Mills' Ratio		(-0.97)	(-1.18)
Control Variables	YES	YES	YES
Year dummies	YES	YES	YES
Industry dummies	YES	YES	YES
Observations	4,939	4,939	4,939
Pseudo R Squared	0.1630		
R Squared		0.1605	0.1645

This table presents the results for the endogeneity test using Heckman selection model. *D_visit* is an endogenous indicator variable, which equals 1 if the number of site visits is larger than 0 in each year. The exclusion restriction is *Log Passenger Volume*, which is the logarithm of the annual volume of passengers for the province in which the headquarters of a listed firm locates. Year and industry fixed effect are included. Standard errors are clustered at firm level. t-statistics in parentheses. ***, **, and * indicates significance level of 1%, 5% and 10%, respectively.