# Do disclosures of selective access improve market information acquisition fairness? Evidence from company visits in China

Jun Yang, Jing Lu and Cheng Xiang\*

Abstract: With a unique dataset built from company visits to listed firms in China, we examine the impact of timely and detailed disclosures of company visits on market information acquisition fairness. Market reactions around visits are stronger and more predictive of future earnings when visits are disclosed within two trading days after such visits, when compared to that which is disclosed in annual reports long after such visits, suggesting that timely disclosures of visits disseminate the information discovered by visitors to the entire market quickly. Consistent with this argument, we observe that timely disclosures of visits improve the forecast accuracy of non-visiting analysts, reduce forecast dispersion among analysts, and weaken the relative information advantages of visiting analysts. Further, visits are more concentrated in firms with poorer information environments, firms with larger capitalization, and firms in the manufacturing industry, that is, those with larger potential visiting benefits. In summary, timely and detailed disclosures of visits improve market information acquisition fairness and decrease the level of information asymmetry while causing information chilling effects for firms with fewer visiting benefits.

**Keywords:** Company Visits; Selective Access; Analyst Forecasts; Information Acquisition; Mosaic Theory; Information Chilling Effect

JEL Classification Codes: G14; G17; G28; G30

<sup>&</sup>lt;sup>1</sup>Jun Yang and Cheng Xiang are from the School of Economics and Business Administration, Chongqing University, China. Jing Lu is from the School of Economics and Business Administration, Chongqing University, China, and the Innovation Institute of Corporate Finance and Accounting Governance, Chongqing University, China. Address for correspondence: Cheng Xiang, Department of Finance, School of Economics and Business Administration, Chongqing University, China. Tel: +86-23-65106381; e-mail: <u>xiangcheng@cqu.edu.cn</u>. Jun Yang gratefully acknowledges the financial support from the National Social Science Foundation of China (No:15AZD014). Jing Lu gratefully acknowledges the financial support from the National Natural Science Foundation of China (No: 71373296 and 71232004), and the Fundamental Research Funds for the Central Universities (No: 2018 CDJSK 02 PT 10). Cheng Xiang gratefully acknowledges the financial support from the China Postdoctoral Science Foundation (No: 2018M643401).

#### 1. Introduction

As a result of fair disclosure regulations that prohibit managers' selective disclosure of nonpublic material information, analysts and institutional investors now rely more on private contacts with corporate managers, or so-called "selective access," to maintain their information advantages (Koch et al. 2013). According to the 2012 Institutional Investor's All-Europe Research Team survey (Cheng et al. 2016) and Brown et al. (2015), one important means of selective access is to conduct site visits at companies. However, performing empirical studies on the market impact of company visits is difficult due to the lack of data, as visit activities are not mandated to be disclosed in most stock markets.

One exception is the Shenzhen Stock Exchange (SZSE) of China. Since August 2006, SZSE has encouraged listed firms to record and disclose company visits. In 2008, SZSE made these disclosures mandatory and required all firms listed on it to disclose company visits in their annual reports starting from 2009. The mandatory disclosure policy offers a unique setting and data for empirical studies on company visits. With this data, several papers have studied the impact of visits on stock prices of the visited firms (Cheng et al., 2019), visiting analysts' forecast accuracy (Cheng et al., 2016; Han et al., 2018), trade by visiting mutual fund managers (Liu et al., 2017), managers' insider trading (Bowen et al., 2018), and stock price crash risk (Gao et al., 2017; Lu et al., 2018), etc.

In 2012, SZSE implemented a radical reform of its disclosure requirements with respect to company visits. However, prior studies have paid little attention to this. On July 17, 2012, SZSE released the 41<sup>st</sup> memo on its information disclosure requirements (the 41<sup>st</sup> memo hereafter) and required firms listed on it to disclose every visit in detail in a standard summary report within two trading days after such visits. In contrast, before the release of the 41<sup>st</sup> memo, all visits to a given firm in a certain year were required to be disclosed collectively in the firm's annual financial report. To be more specific, before July 17, 2012, non-visitors could only look up company visits in annual financial reports which were released long after the visits themselves were conducted. After July 17, 2012, details on company visits. Since Liu et al. (2017), Cheng et al. (2016), and Han et al. (2018) find that visitors gain significant information advantages through visiting, an important question that is still open for research is how timely and detailed disclosures on company visits would affect market information flow, information acquisition and hence information advantages of visitors.

This study tries to answer abovementioned questions pertaining to the impact of the 41<sup>st</sup> memo with a sample of firms listed on SZSE during 2009-2016. First, we try to understand whether the 41<sup>st</sup> memo is helpful in disseminating valuable firm-specific information discovered by visitors to the entire market. In other words, we try to answer the question whether the 41<sup>st</sup> memo helps to "provide equal access to firms' information for all investors" as it's designed for. We answer this question by investigating the impact of the 41<sup>st</sup> memo on market reactions around visits. Cheng et al. (2019) document significant market reactions around visits and attributed these reactions to

informed trade by visitors. If the information with which visitors trade is disseminated to the entire market in a timely manner, non-visitors would also trade with this information and therefore cause a significant increase in market reactions. Consistent with this prediction, we find that the standardized absolute 3-day ([0,2]) cumulative market model adjusted abnormal returns around visits ( $AN_ABAR_{i,j,q}^{[0,2]}$ ) after July 17, 2012 are about twice that of those before July 17, 2012. Further, the daily abnormal returns during the event window are significantly larger on days when visits are disclosed, which supports the notion that increased market reactions can be attributed to trade by non-visitors. Further tests show that the positive correlation between market reactions and future earnings of firms is also more pronounced after July 17, 2012, suggesting that trade by non-visitors is driven by disclosed valuable firm-specific information rather than by pure attention that is attracted by disclosures on visits.

Next, we examine whether the information asymmetry among market participants decreases after the valuable firm-specific information discovered by visitors is disseminated successfully to the entire market. We study this question by investigating the impact of the 41<sup>st</sup> memo on analysts' forecast accuracy and forecast dispersion. Cheng et al. (2016) and Han et al. (2018) find that visiting analysts improve their forecast accuracy by gaining private information during their visits. If the private information is disclosed to the entire market as required by the 41<sup>st</sup> memo, non-visiting analysts should also benefit from this information and improve their forecast accuracy. In other words, the information advantages of visiting analysts would be weakened by the 41<sup>st</sup> memo. Indeed, we find that though forecasts of visiting analysts remain more accurate in our sample period, the relative accuracy of forecasts made by visiting analysts to those made by non-visiting analysts decreased by more than 50% after July 2012.

Since non-visiting analysts have improved their forecast accuracy after July 2012 and more than 70% earnings forecasts in our sample period were made by non-visiting analysts, we investigate whether the accuracy of firm-level earnings forecasts of SZSE firms also significantly improved after July 2012. To control for the effect of economic events and institutional changes occurring contemporaneously with the release of the 41<sup>st</sup> memo in the China A-share market, we construct a control group with firms listed on the Shanghai Stock Exchange (SSE). Though SSE firms are regulated by the China Security Regulation Committee (CSRC) as SZSE firms are, they are not required to disclose visit activities both before and after July 17, 2012. With a propensity score matching (PSM) procedure, we match each SZSE sample firm with an SSE firm based on their predicted likelihoods of being visited in a given period. We then use a difference-in-difference approach to isolate the impact of the 41<sup>st</sup> memo on firm-level forecast accuracy of SZSE firms with that of contemporaneous confounding events. We find that firm-level forecast accuracy of SZSE firms increases by at least 30% more than that of SSE firms. In contrast, we find that the firm-level forecast dispersion of SZSE firms decreases by about 40% more than that of SSE firms. These findings indicate that the 41st memo improves analysts' information acquisition efficiency and decreases the information asymmetry among visiting and non-visiting analysts.

Since the information advantages of analysts are weakened due to the 41<sup>st</sup> memo, we then study how the 41<sup>st</sup> memo affect analysts' visiting preferences. Based on the cost-benefit analysis, we predict that visits should be more concentrated in firms with greater potential visiting benefits after July 17, 2012. Following prior studies (Cheng et al., 2019; Han et al., 2018), we identify potential visiting benefits with firms' information disclosure quality, firm sizes, and the industry to which firms belong. More valuable firm-specific information can be discovered for firms with lower information disclosure quality (Liu et al., 2017; Han et al., 2018) and visits to larger firms might bring analysts more potential clients. Further, visits to manufacturing firms provide visitors with more opportunities to infer extra information by observing firms' production processes and employee morale (Cheng et al., 2016). In other words, firms with lower information disclosure quality, firms with larger sizes, and firms in the manufacturing industry are associated with larger visiting benefits and thus are more likely to be visited after July 2012. Both analyst-level and firmlevel regression results support our predictions. Though analysts' overall willingness to visit has not changed significantly after July 2012, they are significantly more likely to visit the abovementioned firms. In contrast, firms with higher information disclosure quality, firms with smaller sizes, and firms in industries other than the manufacturing industry are less likely to be visited after July 2012. Therefore, these firms may suffer from the information chilling effect, that is, the reduction in the total amount of information available in the market.

This study differs from prior studies on company visits in two ways and therefore contributes to the growing literature in this field. First, prior studies focus on the market impact of company visit events while this study investigates the market impact of timely and detailed visit disclosures by showing the differences between the market impact of visits before the release of the 41<sup>st</sup> memo and that of visits after it. As a result of the 41<sup>st</sup> memo, visits are now disclosed within two trading days after such visits rather than in annual financial reports long after visits are conducted. Surprisingly, almost all prior studies ignore these important differences.

Second, we investigate the impact of company visits on information acquisition of both visitors and non-visitors while prior studies have focused on the impact of visits on visitors alone (Cheng et al., 2016; Liu et al., 2017, Han et al., 2018, Cheng et al., 2019). In fact, we find that trade by non-visitors contributed significantly to market reactions after July 17, 2012. Further, non-visiting analysts benefited from disclosures on visits and improved their accuracy. These findings suggest that timely and detailed disclosures on visits can reduce the level of information asymmetry and improve market information acquisition fairness and efficiency.<sup>1</sup>

The differences between our study and other studies on company visits allow us to fill two gaps in the literature. First, our study facilitates the identification of how participants in selective access activities including company visits gain superior information. Some scholars such as Solomon et al.

<sup>&</sup>lt;sup>1</sup> Besides, Bowen et al. (2018) study the impact of visits on managers' insider trading while Gao et al. (2017) and Lu et al. (2018) investigate the relationship between the frequency with which firms were visited and the future stock price crash risk of those firms. Nevertheless, these studies differ from our study considerably in both theme and contents.

(2015) and Bushee et al. (2018) justify selective access using the mosaic theory, stating that nonpublic but non-material information disclosed by managers during selective access activities fills the missing information "mosaic" of participants and therefore makes them more informed. Notably, no direct evidence on the mosaic theory is offered in the literature. Other scholars such as Hobson et al. (2012) and Mayew and Venkatachalam (2012) argue that participants may gain extra information from managers' body languages or vocal tones in selective access activities. Han et al. (2018) believe that visiting analysts might benefit from face-to-face interactions with company managers, more flexible responses on part of managers to inquiries, an information "mosaic", or access to material selective disclosures during their visits. However, they did not identify the factor that took effect or was dominant. Cheng et al. (2016) argue that company visits facilitate analysts' information acquisition by observing firm operations and employee morale.

However, visit disclosure reports do not include non-public material information. Including such information would mean that managers have provided it to visitors during visits and violate the regulation on fair disclosures that took effect in the China A-share market since 2007. The written visit disclosure reports obviously cannot express managers' body language nor vocal tones. Non-visiting analysts do not have the opportunities to observe firms' operations, either. Notably, we still observe that non-visiting analysts improve their earnings forecast accuracy with the written visit disclosure reports that do not contain non-public material information. Given that improving the understanding of the intrinsic value of companies with non-material information is the core argument of the mosaic theory, our study provides direct evidence on the explanation of the mosaic theory on information advantages of visitors. To the best of our knowledge, we are the first to provide such evidence.

Second, this study has important regulatory implications on whether and how selective access activities such as company visits should be disclosed. The literature shows that selective access would offer participants notable information advantages. In addition to Liu et al. (2017), Cheng et al. (2016), and Han et al. (2018), Green et al. (2014a, b), Bushee et al. (2017), and Bushee et al. (2018) also observe that analysts and institutional investors gain information advantages through selective access activities such as analyst/investor days and invitation-only conferences. Although some studies contribute these information advantages to the mosaic theory, there are also concerns that managers intentionally or unintentionally disclose non-public material information during these private activities<sup>2</sup>. Therefore, there is a growing debate on whether and how selective access activities should be regulated.

The China A-share market offers a natural experiment to investigate the abovementioned question. SZSE has mandated firms listed on it to disclose company visits since 2009. In contrast, the other stock exchange in China, that is, SSE which is regulated by the CSRC (as the SZSE is) has never mandated firms listed on it to disclose company visits. SZSE required firms listed on it to

<sup>&</sup>lt;sup>2</sup> According to the 2011 RSM Global Analyst and Investor Survey, 47% of the respondents say they often receive "material" information in one-on-one meetings with company. <u>https://www.erim.eur.nl/research/news/detail/1733-investors-frequently-receive-price-sensitive-information-from-companies-in-one-on-one-meetings/</u>

disclose company visits in annual reports before July 2012, and now requires firms to disclose every visit within two trading days after making such visits from July 2012 onward. By comparing market information acquisition activities of market participants in the SZSE and those in the SSE, we are able to study the question of whether selective access activities such as company visits should be disclosed. Meanwhile, the change in the requirements on visit disclosures of SZSE firms offers us the opportunity to study the question of how selective access activities should be disclosed.

This study shows that timely and detailed disclosures on visits not only prevent managers from disclosing non-public material information during visits but also decrease the level of information asymmetry between visitors and non-visitors. In other words, making the private information "mosaic" discovered by visitors public improves the fairness of the information acquisition activities among market participants. Therefore, we provide evidence of the effectiveness of the 41<sup>st</sup> memo which was designed to "provide equal access to firms' information for all investors." Our findings pertaining to the important impact of the 41<sup>st</sup> memo on the fairness of market information acquisition acquisition and market information asymmetry should be of interest for regulators of the SSE. Similarly, our findings should also be of interest for regulators in other stock exchanges, especially those in emerging markets that are associated with opaque information environments and weak legal protections.

The remainder of the paper proceeds as follows. Section 2 introduces institutional backgrounds and reviews related literature. Section 3 describes the sample, data, and variables. Section 4 investigates the impact of the 41<sup>st</sup> memo on stock prices. Section 5 investigates the impact of the 41<sup>st</sup> memo on analysts' earnings forecasts. Section 6 investigates the impact of the 41<sup>st</sup> memo on visitors' visiting preferences. Section 7 concludes.

# 2. Institutional background and literature review

#### 2.1 Regulations by SZSE on company visits

SZSE categorizes company visits into "investor relationship management" activities. In 2003, SZSE issued the "guidance on investor relationship management for firms listed on SZSE" and requires firms listed on it to "try best to accommodate the request of visits...... from investors, analysts, and fund managers, etc." On August 10, 2006, SZSE released the "guidance on fair disclosures for firms listed on SZSE," which encouraged firms listed on it to record such visits and disclose them in periodic reports. In 2008, SZSE revised this guidance and mandated all listed firms on it to record information about participants, dates, locations of such visits and questions discussed during such visits, and disclose them in annual reports since 2009. Table A1 in the appendix demonstrates the typical format and content of disclosures on company visits in annual reports, with the example of Guangdong Provincial Expressway Development Co. Ltd. (GPED).

In 2010, GPED was visited four times by visitors including sell-side analysts and buy-side fund managers. Though the first visit occurred on April 8, 2010, information about this visit and other visits conducted in 2010 was disclosed collectively on March 4, 2011, that is, almost 1 year after

the visit is conducted, in GPED's 2010 annual financial report. According to this annual report, questions about operations, investments, operating planning, and future development strategies were discussed during that visit. However, neither the detail of these questions nor the managers' responses to these questions were disclosed. The attendance of these visits was not disclosed, either<sup>3</sup>.

On July 17, 2012, SZSE released "the 41<sup>st</sup> memo of information disclosure requirementsinvestor relationship management and its disclosure" and set up new requirements on disclosures of company visits. The 41<sup>st</sup> memo requires firms listed on SZSE to disclose every visit respectively within 2 trading days after the visit is conducted, rather than to disclose all visits to a certain firm in a given year in the firm's annual report collectively. Therefore, non-visitors would obtain the detail pertaining to such visits within two trading days after these visits are conducted. The 41<sup>st</sup> memo requires firms to summarize such visits with standard forms, in which the attendance, the detail of questions discussed and responses to these questions are reported. The 41<sup>st</sup> memo also requires firms to upload these summary forms and all files provided to visitors during such visits to SZSE's public web portal, "Hu Dong Yi,"<sup>4</sup> to ensure all information provided to visitors is also disclosed to the entire market. In contrast, before the release of the 41<sup>st</sup> memo, information about such visits was reported in annual reports simultaneously with important financial information such as earnings and cash flows.

We take GEPD as an example again to demonstrate how company visits are disclosed according to the requirements of the 41<sup>st</sup> memo. On March 31, 2016, GEPD hosted a visit by institutional investors and analysts. On April 1, the day after the visit, GEPD disclosed this visit in a standard summary form, which is attached in the appendix as Table A2. Table A2 reports information pertaining to that visit, including the information about visitors, the date, the location, attendant employees, the detail of questions discussed and responses to these questions, etc. According to Table A2, visitors asked about business operations, development prospects, financing progress, dividend plans, equity incentive schemes, and transformation strategies. The vice president and the secretary of the board, the vice chief of the security department, and a manager of the security department of GEPD attended the visit and responded to these questions. Compared with Table A1, the summary form of Table A2 provides much more detail about the visit and is disclosed in a more timely manner, which might significantly affect market information inflow and information acquisition among market participants.

#### 2.2 Selective access and company visits

Ensuring accurate, efficient and fair information flow is a goal of great importance for capital market regulators. To prevent managers from disclosing non-public material information to selective market participants, the so-called "selective disclosures," U.S. Securities and Exchange

<sup>&</sup>lt;sup>3</sup> Before July 17, 2012, a portion of firms only disclosed the month rather than the accurate date of such visits. Some firms vaguely stated that they were visited by "institutional investors" or "analysts" but did not disclose identities of these visitors. Some firms also vaguely stated that the operation and development of firms were discussed during such visits but did not disclose specific questions discussed.

<sup>&</sup>lt;sup>4</sup> http://irm.cninfo.com.cn/szse/index.html

Commission implemented the Regulation Fair Disclosure (Reg FD) on August 10, 2000, to ease the issues of asymmetric information among analysts, institutional investors and individual investors. Subsequently, regulators of other stock markets including the China A-share market issued similar regulations on fair disclosures.<sup>5</sup>

The literature shows that Reg FD and similar regulations reduce information advantages of analysts and institutional investors, and hence level the playing field (Bailey et al. 2003; Heflin et al. 2003; Gintschel, 2004; Chen et al., 2010; Bhojraj et al., 2012). As stated in a survey by Koch et al. (2013), as a response to Reg FD, institutional investors and analysts attempt to contact managers privately to obtain information advantages again. Bushee et al. (2017) define private contacts between selective market participants and corporate managers as "selective accesses" corresponding to selective disclosures. The means of selective accesses include broker-hosted investor conferences (Green et al., 2014a, b; Bushee et al., 2011), roadshows (Bushee et al., 2018), analyst/investor days (Kirk and Markov, 2016) and company visits (Soltes, 2014; Solomon and Soltes, 2015; Cheng et al., 2016). While participants in investor conferences, roadshows, and analyst/investor days would only meet managers informally during the break or after these activities, company visits offer visitors opportunities to meet managers in a private, formal and face-to-face manner. According to the 2012 Institutional Investor's All-Europe Research Team survey, investors pay more attention to analysts' site visits than to their earnings forecast reports (Cheng et al. 2016). Based on surveys and interviews with analysts in the United States, Brown et al. (2015) show that private communication with managers is a more useful input for analysts' earnings forecasts and stock recommendations when compared to their own primary research, firms' recent earnings performances and financial reports.

As long as managers do not disclose non-public material information during such visits, they do not violate Reg FD or similar regulations. Therefore, few regulators require firms to disclose such visits, making it difficult to study the market impact of such visits empirically. Soltes (2014) uses only 75 private interactions between analysts and managers of one NYSE-trade firm to study the causes and the impact of these interactions. Solomon and Soltes (2015) investigate the impact of private meetings on investor decisions with a sample of a 6-year period covering over 900 meetings between senior managers and investors. In contrast, mandatory disclosures required by SZSE provide scholars with a unique dataset of company visits.

Using this unique dataset, Cheng et al. (2019) observe that such visits induce significant market reactions. These reactions are predictive of future earnings of firms, suggesting that visitors discover information related to companies' intrinsic value. Liu et al. (2017) examine the motivation and market impact of company visits by mutual funds and observe that trades by mutual funds after such visits are profitable and predict the future earnings of firms that are visited. These findings suggest

<sup>&</sup>lt;sup>5</sup> On Jan 30, 2007, CSRC released "the guidance on information disclosure management for listed companies", which clearly stated that firms listed on SSE and SZSE must not provide inside information when communicating with market participants.

that institutional investors such as mutual funds would gain information advantages from such visits and make better investment decisions thereafter. Cheng et al. (2016) observe that company visits are helpful for analysts in improving the accuracy of their earnings forecasts, and this effect is stronger for manufacturing firms, firms with more tangible assets, and firms with more concentrated business lines, indicating that analysts gain extra information by observing firms' operations. With a longer sample period, Han et al. (2018) also observe that analysts benefit from company visits, especially visits to firms that are more neglected or less accessible. Gao et al. (2017) and Lu et al. (2018) find a positive correlation between the frequency by which firms are visited and firms' future stock price crash risk.

To summarize, company visit disclosures mandated by SZSE provide a unique dataset to study the market impact of company visits empirically. Overall, the literature shows that visitors obtain valuable firm-specific information of firms that are visited. As demonstrated in Table A2, disclosures of company visits are made in a more timely and more detailed manner after the release of the 41<sup>st</sup> memo, to which little attention is paid by the literature. One exception is Bowen et al. (2018) that examine how the 41<sup>st</sup> memo affects insider trading around company visits. They observe that disclosures of such visits draw great market attention and insiders take advantage of this attention by timing their trading. Nevertheless, how would timely and detailed disclosures of such visits affect market information flow and information acquisitions are topics still open for research.

#### 3. Research design

#### 3.1 Hypotheses

First, we investigate whether the 41<sup>st</sup> memo is helpful in disseminating valuable information that is discovered during company visits to the entire market. To do so, we study the differences between market reactions around visits before July 17, 2012 and those around visits after that date. Prior studies document significant abnormal market reactions around selective access activities. Kirk and Markov (2016) observe that abnormal absolute returns and abnormal trading volume during the three-day window of analyst/investor days increase by approximately 29% and 27%, respectively. Bushee et al. (2017) observe that though invitation-only conferences are webcast to non-attendants, trade sizes significantly increase during the hours when firms provide off-line accesses to investors, suggesting that selective accesses provide present investors with valuable information that they trade upon. Bushee et al. (2018) identify private activities between managers and investors with corporate jet flight patterns and observe that these private meetings, the "roadshows," cause significantly greater abnormal stock market reactions than other flight windows do. Cheng et al. (2019) observe that market reactions around corporate site visits are statistically and economically significant and are positively associated with firms' future financial performances.

To summarize, the literature shows that participants in selective access activities gain information advantages. Their informed trades cause abnormal changes in stock prices that predict future earnings of firms. If the 41<sup>st</sup> memo is effective, valuable information discovered by visitors

should be disseminated to the entire market within two trading days after such visits. As a result of this, now non-visitors would also trade with this information. Therefore, we expect that market reactions around visits would be significantly larger and be more predictive of firms' future earnings after July 17, 2012. Our hypothesis H1a and H1b are thus stated as follows:

H1a: Ceteris paribus, market reactions around visits are stronger after the release of the 41<sup>st</sup> memo.

H1b: Ceteris paribus, market reactions around visits are more predictive of future earnings of firms after the release of the 41<sup>st</sup> memo.

Next, we examine how the 41<sup>st</sup> memo affects earnings forecasts of analysts. Analysts rely on information acquisitions to forecast earnings. According to the surveys and interviews that are conducted by Brown et al. (2015), sell-side analysts consider private communications with managers a more useful input to their earnings forecasts when compared to recent financial reports. Indeed, Cheng et al. (2016) and Han et al. (2018) find that analysts' visits to firms significantly improve the accuracy of their earnings forecasts on these firms. Solomon and Soltes (2015) and Bushee et al. (2017) justify selective access activities with the mosaic theory, suggesting that the non-material information disclosed by managers during such activities fill in analysts' missing information.

Because of the 41<sup>st</sup> memo, the information "mosaic" that is privately owned by visiting analysts before July 17, 2012 is now disclosed to non-visiting analysts within two trading days. If it's the information "mosaic" that improves the forecast accuracy of visiting analysts, then after July 17, 2012, non-visiting analysts should also benefit from the information "mosaic" and improve their forecast accuracy. Therefore, at the analyst-level, we expect that the forecast accuracy of non-visiting analysts also improves after July 17, 2012 and hence the information advantages of visiting analysts are relatively weakened. Since non-visiting analysts contribute largely to firms' earnings forecasts,<sup>6</sup> we also expect that the accuracy of earnings forecast accuracy of non-visiting analysts. Besides, we expect that firm-level earnings forecast dispersion on SZSE firms decreases since now visiting and non-visiting analysts at least partially rely on the same information mosaic to make forecasts. Our hypothesis H2a and H2b are thus stated as follows:

H2a: Ceteris paribus, analyst-level earnings forecast accuracy of non-visiting analysts improves after the release of the 41<sup>st</sup> memo.

H2b: Ceteris paribus, firm-level earnings forecast accuracy (dispersion) of SZSE firms increases (decreases) after the release of the 41<sup>st</sup> memo.

The literature on Reg FD shows that though Reg FD improves the fairness of information acquisition, it also decreases analysts' and institutional investors' willingness to search and disseminate information, causing the reduction in the total amount of information available in the market, or the so-called "chilling effects." For example, Irani and Karamanou (2003) document a

<sup>&</sup>lt;sup>6</sup> In our sample period, about 70% earnings forecasts are made by non-visiting analysts in the China A-share market.

decrease in analyst coverage after the passage of Reg FD. Gomes et al. (2007) show that the adoption of Reg FD caused a significant shift in analyst attention, resulting in a loss of analyst coverage and higher capital costs for small firms. Srinidhi et al. (2009) demonstrate that the quality of analysts' long-term forecasts deteriorated after the implementation of Reg FD.

As discussed above, we expect that timely and detailed disclosures of company visits weaken the information advantages of visitors, which might decrease analysts' willingness to visit and thus induce the information chilling effect. Cheng et al. (2016) show that analysts make their visit decisions based on a cost-benefit analysis. Therefore, we expect analysts are more willing to visit companies that benefit them more after the 41<sup>st</sup> memo. In other words, companies with fewer visit benefits are more likely to suffer from the information chilling effect. Our third hypothesis is thus stated as follows:

# H3: Ceteris paribus, visits are more concentrated in firms that benefit visitors more after the release of the 41<sup>st</sup> memo.

# 3.2 Sample selection

The sample used in Han et al. (2018) and Liu et al. (2017) starts in 2007. However, before 2009, disclosures on company visits are voluntary rather than mandatory. To avoid self-selection bias, we use 2009–2016 as our sample period. Cheng et al. (2016) and Han et al. (2018) study visits involving at least one sell-side analyst while Liu et al. (2017) focus on visits involving at least one mutual fund. After the 41<sup>st</sup> memo, no matter by whom company visits are conducted, information discovered during such visits would be disseminated to the entire market. Therefore, we use all visits as observations in our sample.

We hand collect visit records from Jan 1, 2009 to July 16, 2012 from annual financial reports and collect visits from July 17, 2012 to Dec 31, 2016 from Hu Dong Yi, the official website where company visits are required to be disclosed<sup>7</sup>. Next, we delete visits to firms listed on the China Growth Enterprise Market (GEM) section, firms in the financial industry and firms that are specially treated because of delisting risk. We also delete visits that occur between 1 trading day before earnings announcements and 1 trading day after these announcements. At last, we delete visits with missing control variables.

The final sample includes 34,276 visits of 1,191 SZSE firms from 2009–2016. Panel A of Table 1 summarizes the distribution of these visits. After a gradual increase from 2009–2012, the number of visits increases to 5,057 in 2013 and remains near 5,000 thereafter. The number of firms that are visited increases from 248 in 2009 to 798 in 2016. 55.45% of sample firms are visited at least once within the sample period and 46.63% (59.04%) of sample firms are visited at least once before (after) July 17, 2012. On average each sample firm is visited 3.95 times per year during 2009-2016.

We report summary statistics on the number of visitors in each visit and the frequency by which

<sup>&</sup>lt;sup>7</sup> <u>http://irm.cninfo.com.cn/szse/index\_en.html</u>

visitors re-visit firms in Panel B of Table 1. <sup>8</sup>On average, there are 2.95 visitors in each visit before July 17, 2012 and 4.15 visitors after that. In addition, on average 2.06 (0.88) institutional investors (sell-side analysts) are present in each visit before July 17, 2012, and 2.71 (1.44) institutional investors (sell-side analysts) are present in each visit after that date. The differences between the number of visitors before and after July 17, 2012 are highly significant (all t-statistics exceeds 19). The intervals between two visits from the same visitor to the same firm are also longer after July 17, 2012. Before (after) July 17, 2012, on average visitors will visit a firm again 239 (383) days after their last visit.

In Panel C of Table 1, we report summary statistics on the types of questions discussed during visits. Following Han et al. (2018), we divide these questions into nine types and define type 4-9 as deep questions<sup>9</sup>. *Typen* equals 1 if questions of type *n* are discussed during a certain visit (n=1, 2... 9). *NType* indicates the total number of question types discussed in a single visit. The distribution of question types in our sample is comparable with Han et al. (2018). Routine operations (questions of type 1) are asked in more than 98% visits. Questions of other types are more frequently discussed in visits after July 17, 2012. *NType is* also significantly larger after July 17, 2012. One possible reason is that before July 17, 2012, some companies only vaguely stated with a few words that the operation and development of companies were discussed during such visits and did not disclose any specific questions discussed nor responses to these questions. In contrast, detailed questions and responses are mandatory to be disclosed after July 17, 2012. Intuitively we have much more information to identify the types of questions discussed after July 17, 2012.

Since detailed information about each visit is disclosed after July 17, 2012, we also report the contents and attendant employees of these visits in Panel D of Table 1. On average, 6.99 questions are asked in one visit and each question is responded with 151.58 Chinese characters. Following Bowen et al. (2018), we use the NLPIR textual analysis software and tag positive and negative phrases in visit disclosure summary reports. We then follow Piotroski et al. (2016) to measure the tone of these disclosure reports as the number of positive phrases minus the number of negative

<sup>&</sup>lt;sup>8</sup> More than 99% visitors are sell-side analysts or institutional investors and the rest of visitors are individual investors or newspaper reporters. For convenience, we report summary statistics regarding visiting analysts or institutional investors only.

<sup>&</sup>lt;sup>9</sup> Type 1 concerns routine operations. Type 2 concerns payout policies. Type 3 concerns stock performances. Type 4 concerns stock issuances and ownership structures. Type 5 concerns asset operations. Type 6 concerns company debts. Type 7 concerns corporate governance. Type 8 concerns top management teams. Type 9 concerns detailed company performances. See the online appendix of Han et al. (2018) for details.

ones, scaled by the total number of positive and negative phrases. We denote the positive-negative tone ratio as *PNR*. The mean of *PNR* is 0.428, which is significantly positive (t-statistics=5.88) and is comparable with that (0.543) in Bowen et al. (2018).

The median number of attendant employees in each visit is 2. Chairmen of the boards are present in 7.76% visits while vice chairmen of the boards are present in 1.11% visits. CEOs and CFOs are present in 5.19% and 6.39% visits, respectively. At least one top executive abovementioned is present in 16.48% visits.

#### [INSERT TABLE 1 ABOUT HERE]

#### 3.3 Variables Definition

We measure market reactions around visits with the standardized absolute cumulative abnormal returns (AN ABAR) in the three-day window ([0,2]) around visits:<sup>10</sup>

$$AN\_ABAR_{i,j,q}^{[0,2]} = \frac{ABAR_{i,j,q}^{[0,2]} - Mean\_ABAR_{i,j,s}^{[0,2]}}{STD\_ABAR_{i,j,s}^{[0,2]}}$$
(1)

 $ABAR_{i,j,q}^{[0,2]}$  are the absolute cumulative market model adjusted abnormal returns over the threeday window ([0,2]) around the  $j_{th}$  visit to firm i in quarter q. Day 0 is the visit day. The market model is estimated with the last 240 daily returns in a rolling manner.  $Mean_ABAR_{i,j,s}^{[0,2]}$  is the mean of 80 three-day absolute cumulative market model adjusted abnormal returns in the normal period ([-240, -1]) and  $STD_ABAR_{i,j,s}^{[0,2]}$  is the standard deviation of these returns.

Similarly, we define the standardized absolute daily abnormal returns on day n as follows:

$$AN\_ABAR_{i,j,q}^{n} = \frac{ABAR_{i,j,q}^{n} - Mean\_ABAR_{i,j,s}^{n}}{STD\_ABAR_{i,j,s}^{n}} \qquad n = 0, 1, 2$$

$$(2)$$

 $ABAR_{i,j,q}^{n}$  is absolute daily market model adjusted abnormal return for day *n* during the visit event window ([0,2]). *Mean\_ABAR\_{i,j,s}^{n}* is the mean of absolute daily market model adjusted abnormal returns in the normal period ([-240, -1]) and  $STD_ABAR_{i,j,s}^{n}$  is the standard deviation of these returns. Moreover, to investigate the correlation between market reactions around visits and firms' future earnings, we define  $CAR_{i,j,q}^{[0,2]}$  as the cumulative market model adjusted abnormal returns over the three-day window ([0, 2]).

Next, we define two proxies for earnings forecast accuracy  $(Acc_{i,q})$  expressed as equations (3) and (4). We calculate forecast accuracy quarterly to capture any quarter-specific effect.  $Acc_{i,q}^{1}$  is -1 times the absolute difference between firm *i*'s reported annual EPS in year *t* (*EPS*<sub>*i*,*t*</sub>) and the mean of forecasted annual EPS made by individual analysts in quarter *q* (*FEPS*<sub>*i*,*k*,*q*,*t*), scaled by firms' stock</sub>

<sup>&</sup>lt;sup>10</sup> Cheng et al. (2019) use a two-day window of [0,1] while Bowen et al. (2018) use as three-day window of [-1,1]. We use the window of [0,2] because it is the window within which firms are required to disclose visits after the release of the  $41^{\text{st}}$  memo.

prices at the beginning of the quarter ( $P_{i,q}$ ). <sup>11</sup> In equation (4),  $Acc_{i,q}^2$  is scaled by firms' reported annual EPS.

$$Acc_{i,q}^{1} = -\frac{|EPS_{i,t} - \frac{1}{N}\sum_{k=1}^{N} FEPS_{i,k,q,t}|}{P_{i,q}}$$
(3)

$$Acc_{i,q}^{2} = -\frac{|EPS_{i,t} - \frac{1}{N}\sum_{k=1}^{N} FEPS_{i,k,q,t}|}{EPS_{i,t}}$$
(4)

Finally, we define analysts' forecast dispersion  $(Disp_{i,q})$  as the standard deviation of individual forecasts made in quarter *q*. A larger  $Disp_{i,q}$  suggests a higher level of information asymmetry among analysts.

$$Disp_{i,q} = STD(FEPS_{i,k,q,t})$$
(5)

The other variables used in this study are defined in Table A3 in the appendix. Returns, firm characteristics, analyst earnings forecasts, and other data are all obtained from the China Stock Market & Accounting Research (CSMAR), a leading financial data provider in China.

# 4. The impact of the 41<sup>st</sup> memo on market reactions around visits

# 4.1 Double sorts analysis on market reactions around visits

Table 2 summarizes the means of  $AN \_ ABAR_{i,j,q}^{[0,2]}$  and compares them among the sub-samples. As shown in Panel A of Table 2, the mean of  $AN \_ ABAR_{i,j,q}^{[0,2]}$  is 0.1109 for the full sample and is significantly larger for visits after July 17, 2012. The mean of  $AN \_ ABAR_{i,j,q}^{[0,2]}$  for visits after July 17, 2012, is nearly twice of that before July 17, 2012 (0.1346 versus 0.0712). This finding is consistent with our H1a that market reactions around visits have become larger since the release of the 41<sup>st</sup> memo.

We then investigate whether the larger  $AN \_ ABAR_{i,j,q}^{[0,2]}$  after July 17, 2012 is attributed to factors rather than the 41<sup>st</sup> memo. Cheng et al. (2019) show that market reactions around visits are stronger for visits conducted by institutional investors, for group visits with multiple visitors, for visits to manufacturing firms, and for visits to firms with poor information environments. Han et al. (2018) find that analysts obtain more valuable information if they ask deep questions on their visits. Moreover, market reactions around visits may be affected by other major events close to the visits (Cheng et al., 2019). Therefore, we double-sort visits by sample periods and by firm or visit characteristics mentioned above and compare the means of  $AN\_ABAR_{i,j,q}^{[0,2]}$  among these subsamples in Panels B to G of Table 2.

First, we define  $DFund_{i,j,q}$  ( $DGVisit_{i,j,q}$ ) as 1 if the visit is conducted by institutional investors

<sup>&</sup>lt;sup>11</sup> Analysts in the China A-share market usually forecast annual EPS only and do not forecast quarterly EPS. Fiscal year and calendar year are identical in the China A-share market.

(is a group visit) and as 0 otherwise. Second, following Han et al. (2018), we classify questions into nine types and define types 4-9 as deep questions. We then define  $DeepQ_{i,j,q}$  as 1 if at least one deep question is asked during the visit and 0 otherwise. Third, we define  $DManu_{i,q}$  as 1 for manufacturing firms and 0 otherwise. Fourth, following Cheng et al. (2019), we measure the information environment of firms with their information disclosure quality ratings. We define  $DRate_{i,q}$  as 1 if the information disclosure quality of firm *i* is relatively poor and is thus rated as C or D by the SZSE and 0 otherwise. Finally, we define  $Bigevent_{i,j,q}$  as 1 if the visit occurs in the event window ([-5,5]) of major corporate events such as mergers and acquisitions, seasoned equity offerings, right offerings, related party transactions, lawsuits, regulatory violations, and dividends, <sup>12</sup> and 0 otherwise.

As shown in Panel B of Table 2, for visits without institutional investors, the mean of  $AN \_ ABAR_{i,j,q}^{[0,2]}$  is 0.0316 before July 17, 2012 and 0.1255 after that date. This difference (0.0939) is highly significant (t-statistic=3.08) and is large in magnitude relative to the mean  $AN \_ ABAR_{i,j,q}^{[0,2]}$  of the full sample (0.1109). Moreover, for visits with the presence of institutional investors, the mean of  $AN \_ ABAR_{i,j,q}^{[0,2]}$  is 0.1080 before July 17, 2012 and 0.1403 after that date. The difference (0.0322) is significant at 10% (t-statistic=1.92). In other words, market reactions around visits are still much larger after July 17, 2012 after controlling for the effect of institutional investors. Similar findings are recorded in Panels C to G of Table 2 where visits are divided into those before and after July 17, 2012 and are then are grouped by  $DGVisit_{i,j,q}$ ,  $DeepQ_{i,j,q}$ ,  $DManu_{i,q}$ ,  $DRate_{i,q}$ , and  $Bigevent_{i,j,q}$ . No matter by which firm or visit characteristics the visits are grouped, the means of  $AN \_ ABAR_{i,j,q}^{[0,2]}$  are always significantly larger after July 17, 2012, supporting H1a that the 41<sup>st</sup> memo induces larger market reactions around visits.

# [INSERT TABLE 2 ABOUT HERE]

Interestingly, the impact of institutional investors and manufacturing firms on  $AN \_ ABAR_{i,j,q}^{[0,2]}$  is significantly weaker after July 17, 2012, while the impact of information disclosure quality and deep questions is significantly larger after July 17, 2012. As shown in Panel B of Table 2, the difference between Mean( $AN \_ ABAR_{i,j,q}^{[0,2]}$ ) of visits with institutional investors and that of visits without institutional investors is 0.0764 with a significance level of 1% (t-statistic=4.07) before July 17, 2012, but is only 0.0148 and is insignificant (t-statistic=0.76) after July 17, 2012. The difference-in-difference is -0.0617 with a significance level of 5% (t-statistic=-2.29). Similarly, as shown in Panel E, the impact of manufacturing firms (*DManu*) on Mean( $AN \_ ABAR_{i,j,q}^{[0,2]}$ ) is 0.0685 (t-statistic=2.47) with a significance level of 5% before July 17, 2012, but is only 0.0139 and is insignificant (t-statistic=0.63) after July 17, 2012. The difference-in-difference is -0.0546 with a significance level of 5% (-2.41). In contrast, the impact of deep questions (*DeepQ*) on

<sup>&</sup>lt;sup>12</sup> Cheng et al. (2019) use an event window of [-1,1]. More conservatively, we use an event window of [-5,5]. Similar findings are inferred when we use an event window of [-1,1] following Cheng et al. (2019).

Mean( $AN \_ABAR_{i,j,q}^{[0,2]}$ ) in Panel D is insignificant before July 17, 2012 (0.0004 with a t-statistic of 0.09) and is 0.0385 (t-statistic=1.89) after that. The difference-in-difference is 0.0381 with a significance level of 10% (t-statistic=1.92). The impact of low information disclosure quality (*DRate*) in Panel F on Mean( $AN \_ABAR_{i,j,q}^{[0,2]}$ ) is 0.0248 (t-statistic=1.93) before July 17, 2012 and is 0.0522 (t-statistic=2.51) after July 17, 2012. The difference-in-difference is 0.0274 with a significance level of 10% (t-statistic=1.89). The impact of group visits (*DGvisit*) and big events (*Bigevent*) does not change significantly after July 17, 2012.

Findings mentioned above are consistent with our argument pertaining to the impact of the 41<sup>st</sup> memo. Before July 17, 2012,  $AN \_ ABAR_{i,j,q}^{[0,2]}$  are caused by trade by visitors alone, because nonvisitors were not aware of these visits until they were mentioned a few months later in the forecast reports produced by visiting analysts, or until they were disclosed in annual reports in the subsequent year. However, since July 17, 2012, visits have been disclosed in detail to the entire market in a timely manner and non-visitors are also able to trade with the information so disclosed. Obviously, non-visitors considerably outnumber visitors. As a result of this, trade by non-visitors would not only increase  $AN\_ABAR_{i,j,q}^{[0,2]}$  significantly but would also lead to the situation wherein  $AN\_ABAR_{i,j,q}^{[0,2]}$  is less determined by trade by visitors. In other words, whether visitors would trade with the newly discovered valuable firm-specific information and how much information visitors would trade with matters relatively less to  $AN\_ABAR_{i,j,q}^{[0,2]}$  after July 17, 2012. In contrast, how much new valuable firm-specific information is disclosed to non-visitors matters much more to  $AN\_ABAR_{i,j,q}^{[0,2]}$  after July 17, 2012.

To be more specific, the presence of institutional investors increases  $AN \_ ABAR_{i,j,q}^{[0,2]}$  because they may trade for profit immediately after gaining private information during the visits. This effect is significantly smaller after July 17, 2012 because even if no institutional investors are present at the visits, information discovered during the visits would soon be incorporated into stock prices as a result of trade by non-visitors. Similarly, though visitors are more likely to infer extra information on manufacturing firms by personally observing operations and employee morale there (Cheng et al., 2016), the extra information can only be traded with by visitors and would not be disclosed to non-visitors. Therefore, the impact of manufacturing firms on  $AN\_ABAR_{i,j,q}^{[0,2]}$  also decreases after July 17, 2012 because now trade by visitors alone contribute partially to  $AN\_ABAR_{i,j,q}^{[0,2]}$ . In contrast,  $AN\_ABAR_{i,j,q}^{[0,2]}$  are larger for visits to firms with lower disclosure quality and visits during which deep questions are asked because more valuable firm-specific information can be discovered during these visits. Since this information can also be disclosed to non-visitors, the impacts of *DRate* and *DeepQ* are magnified by trade by non-visitors and are therefore significantly larger after July 17, 2012.

# 4.2 Empirical studies on the impact of the 41st memo on market reactions

We formally investigate the impact of the 41st memo on the stock price impact of visits with

model (6). The dependent variable in model (6) is  $AN\_ABAR_{i,j,q}^{[0,2]}$ . The main independent variable of interest is the dummy,  $DPost_{i,j,q}$ , which equals 1 if visits occur after the release of the 41<sup>st</sup> memo and 0 otherwise.

 $AN\_ABAR_{i,j,q}^{[0,2]} = \alpha + \beta_1 DPost_{i,j,q} + \lambda \Sigma Control + \varepsilon_{i,j,q}$ (6)

Following Han et al. (2018) and Cheng et al. (2019), we add a set of control variables in mode (6). First, we add firm or visit characteristics that are mentioned above and are documented in prior studies as being related to market reactions around visits. To be more specific, we control for *DFund*, *DManu*, *DRate*, *DGVisit*, *DeepQ*, and *Bigevent*.

Second, we control for confounding information events that occur before the company visits. Specifically, we control for the contemporaneous absolute market return (*MRet*) and market share turnover (*MTurn*), the cumulative market model adjusted return of firm i in the previous quarter (*QRet*), the absolute cumulative market model adjusted abnormal return of firm i during the last 20 trading days before the visit (*HRet20*) and the share turnover of firm i in the previous quarter (*QTurn*). We also control for institutional ownership (*IO*) and analyst coverage (*Coverage*) which may affect market reactions around visits because of their relationship with firms' information environment (Cheng et al., 2019).

Third, according to Bushee et al. (2011), we control for firm characteristics regarding firm profitability and risk that are related to managers' incentives to meet with visitors privately. Specifically, we control for the book-to-market ratio (BM), firm size (Size), the return on assets (ROA), sales growth (GSales), the debt-to-asset ratio (Lev), the sensitivity to market risk (Beta), firm age (Age), and the indicator of state-owned-enterprises (SOE).

Finally, since all observations in model (6) are from firms that are visited at least once, we also follow Cheng et al. (2019) and adopt the Heckman approach to control for the potential sample selection bias (Heckman, 1979). Specifically, we employ the determinant model of visiting shown in model (7) to calculate the inverse Mills ratio (*IMR*) and then add *IMR* in model (6) as an extra control variable. The dependent variable of model (7) is *DVisit<sub>i,q</sub>* which is 1 if firm *i* is visited by analysts or institutional investors at least once in quarter *q* and 0 otherwise. Independent variables in model (7) are suggested by Cheng et al. (2016), Liu et al. (2017), Han et al. (2018), and Cheng et al. (2019). These variables include *DManu*, market share (*MShare*), firm size (*Size*), *DRate*, analyst coverage (*Coverage*), institutional ownership (*IO*), the number of business segments (*NSeg*), firm age (*Age*), *ROA*, *QRet*, *BM*, *Lev*, *SOE* and two city-level variables, that is, the city-level quarterly GDP growth (*GDPGrowth*) and the number of listed firms (*NFirms*) in the city where firm *i*'s headquarter is located. With industry and quarter fixed effects included, we use probit regressions to regress model (7) with quarterly observations to obtain firm-quarter level *IMR*.

 $\begin{aligned} DVisit_{i,q} &= \alpha + \beta_1 DManu_{i,q-1} + \beta_2 DRate_{i,q-1} + \beta_3 QRet_{i,q-1} + \beta_4 IO_{i,q-1} + \beta_5 Coverage_{i,q-1} \\ &+ \beta_6 BM_{i,q-1} + \beta_7 Size_{i,q-1} + \beta_8 ROA_{i,q-1} + \beta_9 Lev_{i,q-1} + \beta_{10} Age_{i,q-1} + \beta_{11} SOE_{i,q-1} + \beta_{12} MShare_{i,q-1} \\ &+ \beta_{13} NSeg_{i,q-1} + \beta_{14} NFirms_{i,q-1} + \beta_{15} GDPGrowth_{i,q-1} + Industry FE + QuarterFE + \varepsilon_{i,q} \end{aligned}$ (7)

We also control for industry and quarter fixed effects in model (6). Tables A3 and A4 in the

appendix report detailed variable definitions and summary statistics on these variables. Regression results of model (6) are reported in Table 3. Following Cheng et al. (2019), *QRet*, *QTurn*, and firm characteristics are one period lagged in regressions. The *t*-statistics in parentheses are based on standard errors adjusted for firm clustering. In column (1), we use all visits as observations. The coefficient of  $DPost_{i,j,q}$  in column (1) is 0.0842 and is of both statistic and economic importance. T-statistic of  $DPost_{i,j,q}$  is 2.13 in column (1), indicating a 5% significance level. Since mean( $AN_ABAR_{i,j,q}^{[0,2]}$ ) is 0.0712 for visits before July 17, 2012, the coefficient of  $DPost_{i,j,q}$  in column (1) indicates that on average  $AN_ABAR_{i,j,q}^{[0,2]}$  increases 0.0842/0.0712=118.26% after July 17, 2012, when other variables are held unchanged.

Consistent with Cheng et al. (2019) and Han et al. (2018),  $AN \_ABAR_{i,j,q}^{[0,2]}$  is larger for visits with the attendance of institutional investors (*DFund*), for visits to manufacturing firms (*DManu*), for visits to firms with low information disclosure quality (*DRate*), for visits during which deep questions are asked (*DeepQ*), and for visits conducted during the [-5,5] event window of major corporate events (*Bigevent*).  $AN \_ABAR_{i,j,q}^{[0,2]}$  is also larger when the contemporaneous absolute market return (*MRet*) and market share turnover (*MTurn*) are larger. For other control variables, visits cause larger stock price impact for firms with smaller betas (*Beta*), fewer past returns (*QRet*), less analyst coverage (*Coverage*), larger book-to-market ratios (*BM*), smaller sizes (*Size*), and larger *ROA*. The rest of the control variables including *QTurn*, *HRet20*, *DGVisit*, *IO*, *GSales*, *Lev*, *Age*, and *SOE* are insignificantly related to  $AN \_ABAR_{i,j,q}^{[0,2]}$ .

Cheng et al. (2019) argue that the informed trade by visitors after their visits mainly contribute to market reactions around visits. Although sell-side analysts would not trade after the visits, institutional investors such as mutual funds might trade immediately after visiting. Therefore, market reactions after July 17, 2012 might also be stronger if visits are conducted by more institutional investors since then. Though this prediction is inconsistent with the double-sort analysis in Table 2, we examine it empirically by regressing model (6) with visits without the presence of any institutional investors as observations. The regression results are reported in column (2) of Table 3 and are quite similar to those in column (1). The coefficient of  $DPost_{i,j,q}$ , which is 0.1037 with a t-statistic of 2.37, not only remains significantly positive but is also larger in magnitude when compared with that in column (1). In summary, results in columns (1) and (2) of Table 3 are consistent with our hypothesis H1a that market reactions around visits are larger after the release of the 41<sup>st</sup> memo.

Double-sorts analyses in Table 2 also indicate that the impacts of firm and visit characteristics on  $AN\_ABAR_{i,j,q}^{[0,2]}$  change significantly after July 17, 2012. We also formally test these findings with model (6). We make *DPost* interact with *DFund*, *DManu*, *DRate*, and *DeepQ*, and add these interaction terms to model (6) to test the signs and significance levels of these interaction terms. With the inclusion of these interacted dummies, we regress model (6) with a difference-in-difference approach and therefore further alleviate endogeneity concerns between market reactions around visits and firm/visit characteristics.

Columns (3) to (6) in Table 3 report regression results with *DPost\*DFund*, *DPost\*Manu*, *DPost\*DRate*, and *DPost\*DeepQ* included, respectively. Coefficients of *DPost*, *DFund*, *DManu*, *DRate*, and *DeepQ* remain significantly positive in all columns<sup>13</sup>. The coefficients of *DPost\*DFund* and *DPost\*DManu* are significantly negative (-0.0518 with a t-statistic -2.03 and -0.0331 with a t-statistic of -2.08, respectively), and the coefficients of *DPost\*DRate* and *DPost\*DeepQ* are significantly positive (0.0572 with a t-statistic of 2.75 and 0.0520 with a t-statistic of 2.21, respectively). These results confirm the findings in the double-sorts analyses in Table 2. The impacts of the presence of institutional investors and manufacturing firms on  $AN_ABAR_{i,j,q}^{[0,2]}$  are weaker and that of information disclosure quality and deep questions are stronger after July 17, 2012. These findings also support our argument that whether visitors would trade with the newly discovered valuable firm-specific information and how much information visitors would trade with matters relatively less to  $AN_ABAR_{i,j,q}^{[0,2]}$  after July 17, 2012. In contrast, how much new valuable firm-specific information would be disclosed to non-visitors matters more to  $AN_ABAR_{i,j,q}^{[0,2]}$  after that.

To summarize, results in Table 3 are consistent with the double-sorts analyses in Table 2. Results in both tables support hypothesis H1a regarding the stronger market reactions around visits after July 17, 2012. These results also indicate that market reactions become larger after July 17, 2012 because non-visitors would also trade with the information discovered during visits after its disclosure, while only visitors would trade with the information before July 17, 2012.

# [INSERT TABLE 3 ABOUT HERE]

#### 4.3 The impact of the disclosure day on market reactions around visits

If market reactions increase after July 17, 2012 due to trade by non-visitors as we argue in prior sections, they should be significantly larger on disclosure days when information on the visits begins to be available to non-visitors. To examine this prediction, we calculate the standardized absolute daily abnormal returns ( $AN_ABAR_{i,j,q}^n$ , n=0,1,2) during the [0,2] event window. We then define  $DDis_{i,j,q}^n$  as 1 if the visit is disclosed on day n and as 0 otherwise. Since a trading day within the visit event window ([0, 2]) would only be a disclosure day after July 17, 2012,  $DDis_{i,j,q}^n$  is equal to  $DPost_{i,j,q}*DDis_{i,j,q}^n$ . We add  $DDis_{i,j,q}^n$  in model (6) and then regress model (6) with  $AN_ABAR_{i,j,q}^n$  as dependent variables. Control variables are identical to those shown in Table 3.

Table 5 reports related regression results. The coefficient of  $DPost_{i,j,q}$  shows the differences between  $AN\_ABAR_{i,j,q}^n$  before July 17, 2012 and those after that, while the coefficient of  $DDis_{i,j,q}^n$  relates the differences to the disclosure days of visits. All visits are used as observations in Panel A

<sup>&</sup>lt;sup>13</sup> The sum of the coefficient of *DPost* and that of *DPost\*DFund* is 0.0346. The F-statistic and P-value of the test on the sum of these coefficients equals 0 are 3.75 and 0.0530, respectively. Similarly, the sum of the coefficient of *DPost* and that of *DPost\*DManu* is 0.0654. The F-statistic and P-value of the test on that the sum of these coefficients equals 0 are 6.06 and 0.0140, respectively.

and visits without the presence of institutional investors are used in Panel B. The *t*-statistics in parentheses are based on standard errors adjusted for firm clustering. Coefficients of  $DPost_{i,j,q}$  are positive with a 10% or higher significance level in all columns, again supporting the fact that market reactions are larger after July 17, 2012. Coefficients of  $DDis_{i,j,q}^n$  are also positive and are of both statistical and economic significance. Taking column (1) as an example, the coefficient of  $DPost_{i,j,q}$  indicates a 0.0332 increase in  $AN_ABAR_{i,j,q}^0$  after July 17, 2012. Since  $DDis_{i,j,q}^n$  is equal to  $DPost_{i,j,q}*DDis_{i,j,q}^n$ , the coefficient of  $DDis_{i,j,q}^n$  indicates an extra 0.0365 increase in  $AN_ABAR_{i,j,q}^0$  if the visit is disclosed on day 0 of the [0,2] event window. These differences are relatively large when compared to the unconditional mean of  $AN_ABAR_{i,j,q}^0$  (0.0877). Similar findings are inferred in other columns. The larger market reactions on disclosure days of visits support the fact that stronger market reactions after July 17, 2012 are largely attributable to trade by non-visitors who would only have access to information on visits after its disclosure, rather than trade by visitors who would trade based on the information either during or immediately after the visits. Mandatory disclosures on visits are helpful in disseminating valuable firm-specific information discovered during visits to the entire market.

### [INSERT TABLE 4 ABOUT HERE]

#### 4.4 Correlation between market reactions and firms' future earnings

Barber and Odean (2008) state that investors face an asymmetry attention constraint that leads to their net buying of attention-grabbing stocks, or the so-called "attention-driven buying." Recent studies such as Da et al. (2011), Da et al. (2014), Yuan (2015), and Ben Rephael et al. (2017) show that both individual and institutional investors are affected by attention constraints and may trade driven by pure attention. Since company visits draw wild market attention as seen in Brown et al. (2015), market reactions are larger after July 17, 2012 perhaps because the mandatory disclosures on visits draw greater market attention, rather than because they are helpful in disseminating information more quickly and more widely.

To test this possibility, we use model (8) to investigate changes in the correlation between market reactions around visits and future earnings of firms after July 17, 2012. Cheng et al. (2019) verify that market reactions around visits are caused by valuable information discovered during visits by showing that these reactions are predictive of the future earnings of firms. Similarly, if market reactions around visits are larger after July 17, 2012 because disclosures on visits successfully disseminate valuable information discovered during visits to the entire market, market reactions should be more predictive of the future earnings of firms after July 17, 2012.

 $CAR_{i,j,q}^{[0,2]} = \alpha + \beta_1 DPost_{i,j,q} + \beta_2 Earnings_{i,q} + \beta_3 Earnings_{i,q} * DPost_{i,j,q} + \lambda \Sigma Control + IndustryFE + QuarterFE + \varepsilon_{i,j,q}$ (8)

The dependent variable in model (8) is the cumulative market model adjusted abnormal returns over the three-day event window ([0,2]) of visits. The main independent variables of interest are *DPost* and its interaction with the future earnings of firms (*Earnings*). Following Cheng et al. (2019), earnings are measured either by unexpected earnings (*UE*) or the change of return on assets (*dROA*). *UE* is the difference between *EPS* in quarter *q* and *EPS* in quarter *q*-4, scaled by quarter-end stock prices<sup>14</sup>. *dROA* is the difference between the *ROA* in quarter *q* and that in quarter *q*-4. We expect significantly positive coefficients of *Earnings\*DPost* which indicate that market reactions around visits are more predictive of future firm earnings after July 17, 2012.

The regression results of model (8) are reported in Table 5. T-statistics in parenthesis are based on standard errors clustered by firms. Panel A uses all visits as observations and Panel B uses visits without the presence of institutional investors as observations. *DPost* is insignificantly related with  $CAR_{i,i,q}^{[0,2]}$ . *UE* and *dROA* are positively related to  $CAR_{i,i,q}^{[0,2]}$  with a 10% or a higher significance level, which are consistent with Cheng et al. (2019) and support that  $CAR_{i,i,q}^{[0,2]}$  is driven by information related to the fundamental values of firms. *DPost\*UE* and *DPost\*dROA* are positively related to  $CAR_{i,i,q}^{[0,2]}$  with a 5% or higher significance level, supporting the fact that the positive relationship between  $CAR_{i,i,q}^{[0,2]}$  and future firm earnings is more pronounced after July 17, 2012 as expected. The magnitude of coefficients of *DPost\*UE* (*DPost\*dROA*) is larger than that of the coefficients of *UE* (*dROA*), indicating that the impact of the 41<sup>st</sup> memo on correlations between  $CAR_{i,i,q}^{[0,2]}$  and the future earnings of firms is also of economic significance. These findings are consistent with our hypothesis H1b and again confirm that market reactions around visits increase significantly after July 17, 2017 because the information that is discovered during visits and is related to firms' fundamental values is disseminated to the entire market because of the 41<sup>st</sup> memo.

# [INSERT TABLE 5 ABOUT HERE]

#### 5. Analyst Forecast

# 5.1 Analyst-level forecast accuracy

Findings in section 4 suggest that the disclosures on visits contain valuable information that is predictive of the future earnings of firms. Since the information is publicly disclosed to all market participants, hypothesis H2a states that non-visiting analysts would benefit from the disclosures and improve the accuracy of their earnings forecast. In other words, the information advantages of visiting analysts may be weakened because of the  $41^{st}$  memo. We use model (9) to examine this prediction formally. *IAcc<sub>i,k,q</sub>* is the accuracy of firm *i*'s forecasted annual EPS made by analyst *k* in quarter *q*. *IAcc*<sup>1</sup><sub>*i,k,q*</sub> (*IAcc*<sup>2</sup><sub>*i,k,q*</sub>) equals -1 times the absolute difference between the forecasted and reported annual EPS, scaled by quarter-beginning stock prices (reported annual EPS). The dummy *DIVisit*<sub>*i,k,q*</sub> equals 1 if analyst *k* is a visiting analyst who visits firm *i* less than three months before issuing the earnings forecast and equals 0 otherwise. The dummy *DIPost*<sub>*i,k,q*</sub> equals 1 if the forecast is made after July 17, 2012 and equals 0 otherwise. Therefore, the coefficient of *DIVisit*<sub>*i,k,q*</sub> \**DIPost*<sub>*i,k,q*</sub> represents the change in the forecast accuracy of visiting analysts relative to

<sup>&</sup>lt;sup>14</sup> Since most analysts in the China A-share market do not forecast the quarterly EPS of firms, we rely on the naïve model to calculate unexpected earnings.

that of non-visiting analysts.

We control for several variables that are found to be related to analyst forecast accuracy by prior studies. One set of control variables relates to the forecast horizon, resources, and abilities of analysts. Analysts make more accurate forecasts if the time gap between the forecast and the earnings announcement, or the forecast horizon, is shorter (Duru and Reeb, 2002), if their brokerage firms are larger and therefore have more resources (Horton et al., 2013), if fewer firms are covered by their brokerage firms at the same time, and if they or their brokerage firms have more industry or firm-specific experience (Clement, 1999). Moreover, Malloy (2005) and Bae et al. (2008) found that local analysts have information advantages and make more accurate forecasts. Based on these studies, we first control for the forecast horizon (Horizon) of analyst k and the indicator of local analysts (Local). Local<sub>*i,k,q*</sub> equals 1 if the headquarter of the brokerage firm that employs analyst kis located in the city in which firm i's headquarter is located. We also identify the brokerage firm that employs analyst k and control for the number of analysts employed by the brokerage firm (BSize), the number of firms covered by the brokerage firm (BCover), the industry experience (InExp), and the firm-specific experience (FirmExp) of the brokerage firm in all regressions. InExpk.g is the natural logarithm of years after the establishment of the brokerage firm that employs analyst k.  $FirmExp_{i,k,q}$  is the natural logarithm of years after the brokerage firm that employs analyst k issues the first forecast report for firm *i*. Following prior studies, we also control a set of firm characteristics that affect analyst forecast accuracy. Specifically, we control for earnings volatility (VEPS), the indicator for negative earnings (Loss), the number of following analysts (Coverage), the book-to-market ratio (BM), firm size (Size), firm age (Age), firm financial leverage (Lev), and the indicator for SOEs (SOE). Detailed definitions of these variables are reported in Table A3 in the appendix.

$$IAcc_{i,k,q} = \alpha + \beta_1 DIPost_{i,k,q} + \beta_2 DIVisit_{i,k,q} + \beta_3 DIPost_{i,k,q} * DIVisit_{i,k,q} + \varepsilon_{i,k,q}$$
(9)

Regression results of model (9) are reported in Panel A of Table 6. Coefficients of  $DIPost_{i,j,q}$  are significantly positive in both columns, indicating that both visiting and non-visiting analysts make more accurate forecasts after July 17, 2012. The coefficients of  $DIVisit_{i,j,q}$  is 0.0089 (t-statistic=2.26) in column (1) and is 0.0908 (t-statistic=2.02) in column (2), suggesting that forecasts of visiting analysts are still more accurate than those of non-visiting analysts in our sample period. This is reasonable as visiting analysts can always obtain extra information by observing firm operations personally (Cheng et al., 2016), or from the managers' body language (Hobson et al., 2012) or vocal tones (Mayew and Venkatachalam, 2012). The coefficients of  $DIVisit_{i,j,q}*DIPost_{i,j,q}$  is -0.0047 with a significance level of 5% (t-statistic=-2.19) in column (1), indicating that the difference between the forecast accuracy ( $IAcc^{1}$ ) of visiting analysts and non-visiting analysts decreases 0.0047/0.0089=52.8% after July 17, 2012. Similarly, according to column (2) in Table 7, the difference of  $IAcc^{2}$  between visiting analysts and non-visiting analysts decrease 0.0540/0.0908=59.5% after July 17, 2012. Results in Panel A of Table 6 are consistent with hypothesis H2a. Non-visiting analysts benefit from the disclosures of visits and improve the

accuracy of their forecasts, thus leading to weaker information advantages of visiting analysts after July 17, 2012.

Though we use the difference-in-difference design to address possible endogeneity problems, there are still concerns that unobservable factors affect visiting and non-visiting analysts differently after July 17, 2012 and therefore decrease the differences between their forecast accuracies. Following Cheng et al. (2016), we run two more tests to address these concerns. In the first test, we investigate the impact of the 41<sup>st</sup> memo on the relative forecast accuracy between forecasts made by a certain analyst in a given quarter for firms that he/she visits, and forecasts made by the same analyst in the same quarter but for firms that he/she does not visit. In the second test, we investigate the impact of the 41<sup>st</sup> memo on the relative forecast accuracy between forecasts made by a certain analyst in a given quarter swhen he/she visits the firm and those made by a certain analyst for a given firm in quarters when he/she visits the firm and those made by the same analyst for the same firm in quarters when he/she does not.

Following Bae et al. (2008) and Cheng et al. (2016), we measure the relative forecast accuracy as follows:

$$RAcc_{i,k,q} = (-1) * \frac{IFE_{i,k,q} - AFE_{i,q}}{AFE_{i,q}} \quad (10)$$

*IFE*<sub>*i,k,q*</sub> is the forecast error of analyst *k* on firm *i* in quarter *q* and *AFE*<sub>*i,q*</sub> is the mean forecast error of all analysts covering firm *i* in quarter *q*. We then run model (9) again except that here *RAcc*<sub>*i,k,q*</sub> is used as the dependent variable. Regression results are reported in Panel B of Table 6. In column (3), to investigate the impact of the 41<sup>st</sup> memo on the relative forecast accuracy across firms covered by the same analyst within the same quarter, we require that an analyst makes forecasts for both firms that he/she visits and firms that he/she does not in the same quarter. In column (4), to investigate the impact of the 41<sup>st</sup> memo on the relative forecast accuracy across quarters within the same analyst-firm pair, we require that an analyst not only makes forecasts for a firm in some quarters after he/she visits the firm but also makes forecasts for the same firm in other quarters when he/she does not visit it. The samples in columns (3) and (4) comprise 100,485 and 111,216 analyst-firm-quarter observations, respectively.

Results in Panel B of Table 6 are quite similar with those in Panel A. In both columns (3) and (4), coefficients of  $DIVisit_{i,k,q}$  are significantly positive (t-statistic=7.67 and 8.21, respectively), which again suggests that visiting analysts still obtain some information advantages. Coefficients of  $DIVisit_{i,k,q}*DIPost_{i,k,q}$  are significantly negative (t-statistic=-2.23 and -4.37, respectively) in both columns. The coefficient of  $DIVisit_{i,k,q}*DIPost_{i,k,q}$  in column (3) indicates that the relative forecast accuracy of visiting analysts decreases about 0.1212/0.2165=56.0% after July 17, 2012. Similarly, the coefficient of  $DIVisit_{i,k,q}*DIPost_{i,k,q}$  in column (4) suggests that the relative forecast accuracy of visiting analysts decreases about 0.1387/0.2265=61.2% because of the 41<sup>st</sup> memo. These findings support our hypothesis H2a that after the release of the 41<sup>st</sup> memo, the forecast accuracy of non-visiting analysts improves, and the information advantages of visiting analysts are relatively weakened.

#### [INSERT TABLE 6 ABOUT HERE]

#### 5.2 Firm-level analyst forecast accuracy

As stated in hypothesis H2b, since forecast accuracy of non-visiting analysts improves after July 17, 2012, firm-level forecast accuracy of firms in the SZSE should also improve. We test this hypothesis in this section. One difficulty in testing this hypothesis empirically is that important economic events and institutional changes might occur in the China A-share market contemporaneously with the release of the 41<sup>st</sup> memo, which would thereby confound empirical analyses. To control for confounding events, we construct a control group with the PSM procedure and adopt a difference-to-difference approach.

Besides SZSE, there is the other stock exchange in the China A-share market, that is, SSE which is regulated by the China Security Regulatory Commission as is the SZSE. However, SSE has never required firms listed on it to disclose company visit activities. In other words, SSE firms are subject to events that occur contemporaneously with the 41<sup>st</sup> memo as are SZSE firms. However, SSE firms are not affected by the 41<sup>st</sup> memo of the SZSE and are therefore perfect for the role of the control sample firms.

More specifically, we apply the propensity score matching (PSM) procedure to construct a control sample with SSE firms. First, we run probit regressions of model (7) with both SZSE firms and SSE firms to obtain propensity scores, i.e., the predicted likelihoods of firms being visited in a given year. <sup>15</sup>Second, based on those scores, we use the one-to-one nearest-neighbor matching without replacement to match each SZSE sample firm with an SSE firm for each year. In other words, by using the PSM procedure, each SZSE firm is matched to an SSE firm that is likely to have the same likelihoods of being visited but does not disclose any visits. We label SZSE firms as the treated group and SSE firms as the control group.

We then use a difference-in-difference approach to test whether the relative forecast accuracy of firms in the treated group to that of firms in the control group changes after July 17, 2012. The change in the relative forecast accuracy represents the impact of the  $41^{st}$  memo on forecasts accuracy of the SZSE firms while controlling for confounding events. The regression model here is a lot like model (9) except that forecast accuracy proxies and other variables are constructed at the firm-level instead of at the analyst-level. Correspondingly, we use  $Acc_{i,q}$ , that is, firm-level earnings forecast

<sup>&</sup>lt;sup>15</sup> Since April 2009, SSE firms are required to submit summary reports of visits to SSE to ensure no non-public material information is disclosed to visitors. As a result of this, generally, SSE firms hosting visits in a given year would claim in their annual reports that they comply with the fair disclosure requirement of SSE when being visited. Some firms also mention these visits in the "investor relationship management" section of their official websites. But details about visitors, attendant employees or questions discussed are usually not mentioned neither in annual reports nor on firms' official websites. In other words, though details about visits to SSE firms are not publicly available, we are able to hand-collect information about whether an SSE firm is visited in a given year. During our sample period, about 35% SSE firms are believed to be visited at least once during a given year.

accuracy proxies calculated with equation (3) or (4) as dependent variables. Forecast accuracy is scaled by quarter-beginning stock prices and reported annual EPS in  $Acc_{i,q}^1$  and  $Acc_{i,q}^2$ , respectively. Main independent variables of interest are *DTreated*<sub>i,q</sub>, *DAPost*<sub>i,q</sub>, and their interaction terms. *DTreated*<sub>i,q</sub> equals 1 if firm *i* is in the treated group and equals 0 otherwise. The 41<sup>st</sup> memo officially takes effect starting from July 17, 2012. Therefore, we define the dummy *DAPost*<sub>i,q</sub> as 1 if quarter *q* is later than the second quarter in 2012 and as 0 otherwise. The coefficient of *DTreated*<sub>i,q</sub>\**DAPost*<sub>i,q</sub> reports the changes in forecast accuracy of SZSE firms relative to that of SSE firms.

We control the set of control variables related to the forecast horizon, resources, and abilities of analysts as we do in the last section. For all analysts covering firm *i* in quarter *q*, we calculate their mean forecast horizons (*MHorion*) and control for them in all regressions. We also identify brokerage firms that employ these analysts and control for the mean number of analysts employed by these brokerage firms (*MBSize*), the mean number of firms covered by these brokerage firms (*MBSize*), the mean number of firms covered by these brokerage firms (*MBCover*), the mean industry experience (*MInExp*), and the mean firm-specific experience (*MFirmExp*) of these brokerage firms in all regressions. We also control for earnings volatility (*VEPS*), the indicator for negative earnings (*Loss*), the number of following analysts (*Coverage*), the book-to-market ratio (*BM*), firm size (*Size*), firm age (*Age*), firm financial leverage (*Lev*), and the indicator for *SOEs* (*SOE*) as we do in the last section.

We report related regression results in Panel A of Table 7 where  $Acc_{i,q}$  is calculated with forecasts of both visiting and non-visiting analysts. Quarter and industry fixed effects are controlled and the *t*-statistics in parenthesis are based on standard errors adjusted for firm clustering. The coefficient of *DTreated*<sub>*i,q*</sub> is positive with the significance level of 1% in column (1) but is insignificant in column (2). In column (1), the coefficient of *DTreated*<sub>*i,q*</sub>\**DAPost*<sub>*i,q*</sub> is 0.0107 with a significance level of 5% (t-statistic=2.43), and that of *DAPost*<sub>*i,q*</sub> is 0.0260 with a significance level of 1% (t-statistics=14.46). These findings suggest that  $Acc_{i,q}^{1}$  improves significantly after the second season of 2012 for both firms in the treated group and firms in the control group, but it improves 0.0107/0.0260=41.2% more for firms in the treated group when compared to firms in the control group. Similarly,  $Acc_{i,q}^{2}$  improves 0.2912/0.9708=30.0% more for firms in the treated group after the second season of 2012. Since the effect of confounding events other than the 41<sup>st</sup> memo are controlled by the difference-in-difference approach, these results support our hypothesis H2b that firm-level forecast accuracy of SZSE firms improves significantly after the release of the 41<sup>st</sup> memo.

Although the likelihoods of being visited are similar for firms in both groups in theory, they may be different in reality. Since analysts could directly improve their forecasts accuracy by making visits, firm-level forecast accuracy of SZSE firms would also improve more if these firms are visited by more analysts when compared to SSE firms. To rule out this possibility, we re-calculate  $Acc_{i,q}$  for firms in the treated group with forecasts by non-visiting analysts alone. Panel B in Table 7 reports the regression results with re-calculated  $Acc_{i,q}$ . The coefficient of  $DTreated_{i,q}$  is insignificant now, whereas that of  $DAPost_{i,q}$  remains significantly positive with a slight decrease in magnitude. Coefficients of  $DTreated_{i,q}*DAPost_{i,q}$  also remain significantly positive (t-statistics equal 2.36 and

2.43 in columns (3) and (4), respectively). Compared with SSE firms,  $Acc_{i,q}^{1}$  ( $Acc_{i,q}^{2}$ ) improves 0.0079/0.0191=41.36% (0.2243/0.8355=26.85%) more for SZSE firms after the second quarter of 2012. These findings also support hypothesis H2b that forecast accuracy of SZSE firms improves significantly after the release of the 41<sup>st</sup> memo. These findings also suggest that non-visiting analysts improve their forecast accuracy and hence contribute to the improved firm-level forecast accuracy of SZSE firms.<sup>16</sup>

Results in Table 7 suggest that after the second quarter of 2012, the forecast accuracy of SZSE firms improves significantly more than that of SSE firms. As mentioned above, SZSE firms and SSE firms are subject to the same confounding events and have similar likelihoods of being visited, except that SSE firms are not required to disclose visit activities. Therefore, these findings indicate that it is the mandatory disclosures of visits that lead to a more improved firm-level forecast accuracy of SZSE firms. The disclosures improve firm-level forecast accuracy at least partially because non-visiting analysts obtain valuable information mosaics from the disclosures and hence improve their forecast accuracy.

#### [INSERT TABLE 7 ABOUT HERE]

### 5.3 Firm-level analyst forecast dispersion

Hypothesis H2b also states that since visiting and non-visiting analysts share the same information discovered during the visits, the dispersion among their earnings forecasts would decrease. With the control group and the difference-in-difference approach, we use model (11) to test this hypothesis. The dependent variable ( $Disp_{i,q}$ ) is the standard deviation of individual forecasts made in quarter q. The main variables of interest are DTreated, DAPost, and their interaction terms. We control a set of variables that are related to earnings uncertainty and thus to forecast dispersion. Specifically, we control for the volatility of quarterly EPS (VEPS), the indicator of negative net earnings (Loss), the change of return on assets (dROA), and sales growth (GSales). Following Merkley et al. (2017) and other prior studies, we also control the number of analysts covering the firm (Coverage), firm size (Size), and the book-to-market ratio (BM).

$$Disp_{i,q} = \alpha + \beta_1 DTreated_{i,q} + \beta_2 DAPost_{i,q} + \beta_3 DTreated_{i,q} * DAPost_{i,q} + \lambda \sum Control + \varepsilon_{i,q}$$
(11)

Table 8 reports the regression results of model (11).  $Disp_{i,q}$  in column (1) is calculated with both visiting and non-visiting analysts' forecasts, whereas  $Disp_{i,q}$  in column (2) is calculated using non-visiting analysts' forecasts alone. Coefficients of  $DTreated_{i,q}$  are significantly positive in both columns, indicating that on average forecast dispersion is larger for SZSE firms than for SSE firms in our sample period. One possible explanation for this is that only the so-called "main board firms" are listed in the SSE while both main board firms and Small and Medium Enterprise Board (SME) firms are listed on SZSE. Though the listing requirements for main board firms and SME firms are identical, generally SME firms are smaller in size and are more volatile in terms of financial

<sup>&</sup>lt;sup>16</sup> Our arguments still hold when we use all SSE firms instead of the propensity score matched SSE firms as the group of control firms.

performances. Therefore, compared to main board firms, analysts are more heterogeneous about the prospects of SME firms and make more dispersed earnings forecasts on them. Though differences in firm sizes, sales growth, and other firm characteristics between firms in the treated group and those in the control group are insignificant after they are matched with the PSM procedure, the more heterogeneous opinions of analysts and hence the more dispersed forecasts for SME firms still exist, which may cause the positive coefficients of *DTreated*<sub>*i*,*q*</sub> in Table 8.<sup>17</sup>

 $DAPost_{i,q}$  is significantly and negatively related to  $Disp_{i,q}$ , indicating that overall forecast dispersion in the China A-share market decreases after July 2012. The coefficients of  $DTreated_{i,q}*DAPost_{i,q}$  in both columns are negative with the significance level of 5% (t-statistic=-2.45 and -1.97, respectively). The coefficient of  $DAPost_{i,q}$  is -0.0408 and that of  $DTreated_{i,q}*DAPost_{i,q}$  is -0.0168 in column (1), indicating that the earnings forecast dispersion of firms in the treated group decreases -0.0168/(-0.0408)=41.2% more than that of firms in the control group. Similarly, results in column (2) suggest that the earnings forecast dispersion of firms in the control group decreases -0.0192/(-0.0459)=41.8% more than that of firms in the control group. These findings support Hypothesis H2b, that is, timely and detailed disclosures of visits decrease the level of information asymmetry among analysts and therefore decrease their earnings forecast dispersion.

# [INSERT TABLE 8 ABOUT HERE]

# 6. The impact of the 41st memo on visitors' visiting preferences

# 6.1 Analyst-level analysis

As stated in hypothesis H3, visits would be more concentrated in firms that benefit visitors more after information advantages of visiting are weakened by the  $41^{st}$  memo. We first test this hypothesis by investigating the impact of the  $41^{st}$  memo on analyst-level visiting preferences. Based on our review of the literature, we identify the benefits of visiting from three perspectives. First, Liu et al. (2017) and Han et al. (2018) state that analysts or institutional investors would discover more valuable firm-specific information and thus would benefit more from firms with a worse information environment. We measure firms' information environment with their ratings of information disclosure quality issued by the SZSE (*DRate*) as we in prior sections. *DRate* is 1 if firms have relatively low information disclosure quality and are therefore rated as class C/D and 0 otherwise.

Second, we posit that analysts would benefit more from visiting companies with larger market capitalization because access to the management of larger companies might bring analysts more potential clients. Wang (2007), Sidhu et al. (2008), and Duarte (2008) show that small firms are more likely to suffer from the chilling effects of the Reg FD. We define a dummy *DSize<sub>i,q</sub>* that is 1

<sup>&</sup>lt;sup>17</sup> In untabulated tests, we find *DTreated*<sub>*i*,*q*</sub> insignificant when only main board SZSE firms and correspondingly matched main board SSE firms are included in the regressions. By contrast,  $DAPost_{i,q}$  and  $DTreated_{i,q}*DAPost_{i,q}$  remain significantly negative. Also, we find  $DAPost_{i,q}$  and  $DTreated_{i,q}*DAPost_{i,q}$  are also significantly negative related to  $Disp_{i,q}$  when all SSE firms instead of propensity score matched SSE firms are used as the group of control firms.

if the floating market capitalization of firm i in quarter q is larger than the sample median and equals 0 otherwise.

Third, Cheng et al. (2016) believe that visiting analysts discover firm-specific valuable information by observing firm operations and this effect is more pronounced for manufacturing firms that offer visitors more opportunities to observe production processes, operating assets, assembly lines, and employee morale. Therefore, we define the dummy,  $DManu_{i,q}$ , as 1 for manufacturing firms according to the industry classifications of the CSRC and 0 otherwise.

According to hypothesis H3, we expect analysts to visit firms with lower information disclosure quality, firms of larger sizes, and firms in the manufacturing industry more after July 2012. We use model (12) to test this formally. The independent variable  $DIVist_{i,k,q}$  is 1 if analyst k visits firm i less than 3 months before issuing an earnings forecast of firm i in quarter q and 0 otherwise.  $DBen_{i,q}$  are indicators of potential visiting benefits, including  $DRate_{i,q}$ ,  $DSize_{i,q}$ , and  $DManu_{i,q}$ .  $DIPost_{i,k,q}$  is 1 if analyst k issues his/her forecast report after July 17, 2012 and 0 otherwise.  $DBen_{i,q}*DIPost_{i,k,q}$  indicates the differences between the impact of the 41<sup>st</sup> memo on firms with more potential visiting benefits and that on firms with fewer visiting benefits. We use the set of explanatory variables in model (7) as control variables in model (12). We also add a set of analyst-level control variables including forecast horizon (*Horizon*), brokerage firm sizes (*BSize*), the number of firms covered by the brokerage firm (*BCover*), industry experiences (*InExp*), firm-specific experiences (*FirmExp*), and the indicator of local analysts (*Local*) in model (12).

$$DIVisit_{i,k,q} = \alpha + \beta_1 DBen_{i,q} + \beta_2 DIPost_{i,k,q} + \beta_3 DBen_{i,q} * DIPost_{i,k,q} + \sum Control + \varepsilon_{i,k,q}$$
(12)

Table 9 reports the probit regression results of model (12). We report the average marginal effects of variables rather than coefficients of variables in Table 9. Z-statistics of the average marginal effects are reported in parentheses and are based on firm-clustered standard errors. The average marginal effects of DIPost are insignificant in all columns, suggesting that the overall visiting willingness of analysts does not change significantly after July 2012. The average marginal effects of DRate<sub>i,q</sub>, DSize<sub>i,q</sub>, and DManu<sub>i,q</sub> are significantly positive. These results are consistent with prior studies that suggest that analysts are more willing to visit firms with lower information disclosure quality, firms with larger market capitalization, and firms in the manufacturing industry. Since Ai and Norton (2003) show that the interaction effect in logit and probit regressions is a nonlinear marginal effect that varies across observations, we use the Stata command "inteff" proposed by Norton et al. (2004) to calculate the corrected average marginal effects of the interaction terms. We also report related statistics on the marginal effects of these interaction terms in Panel B of Table 9. The mean interaction effect is 0.0385, 0.0433, and 0.0355 (mean zstatistics=2.2147, 2.4861, and 1.9284, respectively) for DManu\*DIPost, DRate\*DIPost, and DSize\*DIPost, respectively. Though the interaction effects are not significant for every observation, they are always positive. These findings suggest that visits are more concentrated in firms with lower information disclosure quality, firms with larger market capitalization, and firms in the manufacturing industry after July 2012 and hence are consistent with hypothesis H3. Since analysts'

information advantages are weakened by the timely and detailed disclosures of visits, analysts are more likely to visit firms with larger visiting benefits after July 2012. In other words, firms with less visiting benefits may suffer from the information chilling effect.

[INSERT TABLE 9 ABOUT HERE]

# 6.2 Firm-level analysis

Next, we investigate the impact of the 41<sup>st</sup> memo on visitors' preferences at firm-level. To do so, we add proxies for visiting benefits (*DBen*) and their interaction terms with *DAPost* to model (7) and test whether firms with lower information disclosure quality, firms with larger sizes, and firms in the manufacturing industry are more likely to be visited after July 17, 2012.

Table 10 reports average marginal effects for probit regressions of the expanded model (7). The dependent variable is  $DAVisit_{i,q}$  which is 1 if firm *i* is visited by analysts at least once in quarter *q* and 0 otherwise<sup>18</sup>. Z-statistics in parenthesis are based on firm-clustered standard errors. The average marginal effects of  $DAPost_{i,q}$  are insignificantly negative. As we do in Table 9 we report the corrected average marginal effects for interaction terms in Table 10 using the method suggested by Ai and Norton (2003) and Norton et al. (2004). The mean interaction effects are 0.0570, 0.0585, and 0.0282 (mean z-statistics=2.1691, 2.9685, and 1.7144) for *DManu\*DAPost*, *DRate\*DAPost*, and *DSize\*DAPost*, respectively. These findings also support hypothesis H3.

# [INSERT TABLE 10 ABOUT HERE]

We also examine the impacts of the  $41^{st}$  memo on the frequencies with which firms are visited. We regress *NVisit<sub>i,q</sub>*, the natural logarithm of 1 plus the number of visits from analysts to firm *i* in quarter *q*, on *DAPost*, proxies for visiting benefits, their interaction terms and the set of explanatory variables in mode1 (7)<sup>19</sup>. Table 11 reports related OLS regression results. Coefficients of *DAPost<sub>i,q</sub>* are insignificantly negative and those of *DManu<sub>i,q</sub>*, *DRate<sub>i,q</sub>*, and *DSize<sub>i,q</sub>* are significantly positive. Coefficients of all interactions are positive with a 10% or higher significance level and are relatively large in magnitude. The coefficient of *DManu<sub>i,q</sub>*\**DAPost<sub>i,q</sub>* is 0.0613 and is 0.0613/0.1019=60.2% of the coefficient of *DManu<sub>i,q</sub>*, indicating that manufacturing firms are much more likely to be visited after July 2012. Similarly, results in columns (2) and (3) in Table 11 suggest that firms with lower information disclosure quality and firms with larger sizes are also more likely to be visited after July 2012. Again, these findings are consistent with hypothesis H3 and support the fact that visits are more concentrated in firms with larger potential benefits after the release of the 41<sup>st</sup> memo. Companies that benefit visitors less are less visited and are more likely to suffer from the information chilling effects because of the 41<sup>st</sup> memo.

[INSERT TABLE 11 ABOUT HERE]

<sup>&</sup>lt;sup>18</sup> In untabulated tests, we get quite similar results when we use  $DVisit_{i,q}$ , the dummy that equals 1 if firm *i* is at least visited once by analysts or institutional investors in quarter *q* and as 0 otherwise, as the dependent variable here. <sup>19</sup> In untabulated tests, we get quite similar results when we define  $NVisit_{i,q}$  as the natural logarithm of 1 plus the number of visits from analysts or institutional investors to firm *i* in quarter *q*.

#### 7. Conclusion

On July 17, 2012, the SZSE issued the 41<sup>st</sup> memo which set up new requirements on disclosures of company visits. The memo requires SZSE firms to disclose every visit "within two trading days" after visits are conducted to ensure the information provided to visitors during such visits is also disclosed to the entire market. With a sample period from 2009 to 2016, we study the impact of the 41<sup>st</sup> memo on market information flow and information acquisition. First, we observe that timely and detailed disclosures induce stronger market reactions around visits that are more predictive of earnings, suggesting that information discovered and privately owned by visitors before July 17, 2012 is disseminated to the entire market after that date as a result of the  $41^{st}$  memo. Second, after July 2012, disclosures of company visits improve the forecast accuracy of non-visiting analysts and reduce forecast dispersion among analysts. These findings suggest that the 41<sup>st</sup> memo weakens the relative information advantages of visiting analysts, improves the fairness of information acquisition among analysts and decreases the level of information asymmetry between visiting and non-visiting analysts. Third, after the release of the 41st memo, visits are more concentrated in firms with poorer information environments, larger capitalization, and firms in the manufacturing industry, that is, firms with larger potential visiting benefits. In other words, firms with better information environments, smaller capitalization and non-manufacturing firms are less visited after the release of the 41<sup>st</sup> memo and therefore suffer from the information chilling effect.

Our findings suggest that timely and detailed disclosures of company visits reduce the level of information asymmetry among market participants while causing information chilling effects for certain firms. By focus on the impact of the 41<sup>st</sup> memo on market information acquisition of both visitors and non-visitors, Our study differs from prior studies on company visits. Findings in this study provide regulatory implication for regulators in emerging markets that are with opaque information environments and weak legal protections, such as the China A-share market. Given that non-visiting analysts improve their forecast accuracy based on written disclosure reports without non-public material information, we provide direct evidence on the explanation of the mosaic theory on visitors' superior information and hence offer meaningful insights to information dissemination and information acquisition in stock markets. Although our study mainly focuses on analysts, disclosures on company visits are available for all market participants. How the disclosures affect other market participants such as individual investors, institutional investors, and managers, is worthy of more attention for future studies.

# References

- Ai, C., and E.C., Norton, 2003, Interaction terms in logit and probit models. *Economic Letters*, 80, 123-129.
- Bae, K. H., R. M. Stulz, and H. P. Tan, 2008, Do local analysts know more? A cross-country study of the performance of local analysts and foreign analysts, *Journal of Financial Economics* 88, 581-606.
- Bailey, W., H. T. Li, C. X. Mao, and R. Zhong, 2003, Regulation fair disclosure and earnings information: Market, analyst, and corporate responses, *Journal of Finance* 58, 2487-2514.

- Barber, B. M., and T. Odean, 2008, All that glitters: The effect of attention and news on the buying behavior of individual and institutional investors, *Review of Financial Studies* 21, 785-818.
- Ben-Rephael, A., Z. Da, and R. D. Israelsen, 2017, It depends on where you search: Institutional investor attention and underreaction to news, *Review of Financial Studies* 30, 3009-3047.
- Bhojraj, S., Y. J. Cho, and N. Yehuda, 2012, Mutual fund family size and mutual fund performance: The role of regulatory changes, *Journal of Accounting Research* 50, 647-684.
- Bowen, R. M., S. Dutta, S. L. Tang, and P. C. Zhu, 2018, Inside the "black box" of private in-house meetings, *Review of Accounting Studies* 23, 487-527.
- Brown, L. D., A. C. Call, M. B. Clement, and N. Y. Sharp, 2015, Inside the "black box" of sell-side financial analysts, *Journal of Accounting Research* 53, 1-47.
- Bushee, B. J., J. Gerakos, and L. F. Lee, 2018, Corporate jets and private meetings with investors, *Journal of Accounting & Economics* 65, 358-379.
- Bushee, B. J., M. J. Jung, and G. S. Miller, 2011, Conference presentations and the disclosure milieu, *Journal of Accounting Research* 49, 1163-1192.
- Bushee, B. J., M. J. Jung, and G. S. Miller, 2017, Do investors benefit from selective access to management?, *Journal of Financial Reporting* 2, 31-61.
- Chen, Z. H., D. S. Dhaliwal, and H. Xie, 2010, Regulation fair disclosure and the cost of equity capital, *Review of Accounting Studies* 15, 106-144.
- Cheng, Q, F. Du, Y.T Wang, and X. Wang, 2019, Do corporate site visits impact stock prices?, *contemporary accounting research* 36, 359-388.
- Cheng, Q., F. Du, X. Wang, and Y. T. Wang, 2016, Seeing is believing: Analysts' corporate site visits, *Review of Accounting Studies* 21, 1245-1286.
- Clement, M. B., 1999, Analyst forecast accuracy: Do ability, resources, and portfolio complexity matter?, *Journal of Accounting & Economics* 27, 285-303.
- Da, Z., J. Engelberg, and P. J. Gao, 2011, In search of attention, Journal of Finance 66, 1461-1499.
- Da, Z., U. G. Gurun, and M. Warachka, 2014, Frog in the pan: Continuous information and momentum, *Review of Financial Studies* 27, 2171-2218.
- Duarte, J., X. Han, J. Harford, and L. Young, 2008, Information asymmetry, information dissemination and the effect of regulation FD on the cost of capital, *Journal of Financial Economics* 87, 24-44.
- Duru, A., and D. M. Reeb, 2002, International diversification and analysts' forecast accuracy and bias, *Accounting Review* 77, 415-433.
- Gao, S., F. Cao, and X. Liu, 2017, Seeing is not necessarily the truth: Do institutional investors' corporate site visits reduce hosting firms' stock price crash risk?, *International Review of Economics & Finance* 52, 165-187.
- Gintschel, A., and S. Markov, 2004, The effectiveness of regulation FD, *Journal of Accounting & Economics* 37, 293-314.
- Gomes, A., G. Gorton, and L. Madureira, 2007, Sec regulation fair disclosure, information and the cost of capital, *Journal of Corporate Finance* 13, 300-334.
- Green, T. C., R. Jame, S. Markov, and M. Subasi, 2014, Access to management and the informativeness of analyst research, *Journal of Financial Economics* 114, 239-255.
- Green, T. C., R. Jame, S. Markov, and M. Subasi, 2014, Broker-hosted investor conferences, *Journal* of Accounting & Economics 58, 142-166.
- Han, Bing, Dongmin Kong, and Shasha Liu, 2018, Do analysts gain an informational advantage by

visiting listed companies?, Contemporary Accounting Research, forthcoming.

- Heckman, J.J, 1979, Sample selection bias as a specification error. Econometrica 47, 153-161.
- Heflin, F., K. R. Subramanyam, and Y. A. Zhang, 2003, Regulation FD and the financial information environment: Early evidence, *Accounting Review* 78, 1-37.
- Horton, J., G. Serafeim, and I. Serafeim, 2013, Does mandatory IFRS adoption improve the information environment?, *Contemporary Accounting Research* 30, 388-423.
- Hobson, J. L., W. J. Mayew, and M. Venkatachalam, 2012, Analyzing speech to detect financial misreporting, *Journal of Accounting Research* 50, 349-392.
- Irani, A. J.,I. Karamanou, 2003, Regulation Fair Disclosure, Analyst Following, and Analyst Forecast Dispersion, *Accounting Horizons*, 17, 15-29.
- Jin, Y., Luo, R., Sun, J., Xu, X., 2017. Corporate Site Visits, Information Asymmetry, and Disclosure Regulation. *Unpublished working paper*.
- Kirk, M. P., and S. Markov, 2016, Come on over: Analyst/investor days as a disclosure medium, *Accounting Review* 91, 1725-1750.
- Koch, A. S., C. E. Lefanowicz, and J. R. Robinson, 2013, Regulation FD: A review and synthesis of the academic literature, *Accounting Horizons* 27, 619-646.
- Kross, W. J., and I. Suk, 2012, Does regulation FD work? Evidence from analysts' reliance on public disclosure, *Journal of Accounting & Economics* 53, 225-248.
- Liu, S. S., Y. H. Dai, and D. M. Kong, 2017, Does it pay to communicate with firms? Evidence from firm site visits of mutual funds, *Journal of Business Finance & Accounting* 44, 611-645.
- Lu, X. W., H. G. Fung, and Z. Q. Su, 2018, Information leakage, site visits, and crash risk: Evidence from China, *International Review of Economics & Finance* 58, 487-507.
- Malloy, C. J., 2005, The geography of equity analysis, Journal Of Finance 60, 719-755.
- Mayew, W. J., and M. Venkatachalam, 2012, The power of voice: Managerial affective states and future firm performance, *Journal of Finance* 67, 1-43.
- Merkley, K., R. Michaely, and J. Pacelli, 2017, Does the scope of the sell-side analyst industry matter? An examination of bias, accuracy, and information content of analyst reports, *Journal Of Finance* 72, 1285-1334.
- Morck, R., B. Yeung, and W. Yu, 2000, The information content of stock markets: Why do emerging markets have synchronous stock price movements?, *Journal of Financial Economics* 58, 215-260.
- Norton, E. C., H. Wang and C. Ai, 2004, Computing interaction effects and standard errors in logit and probit models, *the Stata Journal* 4, 154-167.
- Piotroski, J. D., T. J. Wong, and T. Y. Zhang, 2017, Political bias in corporate news: The role of conglomeration reform in China, *Journal of Law & Economics* 60, 173-207.
- Sidhu, B., T. Smith, R. E. Whaley, and R. H. Willis, 2008, Regulation fair disclosure and the cost of adverse selection, *Journal of Accounting Research* 46, 697-728.
- Solomon, D., and E. Soltes, 2015, What are we meeting for? The consequences of private meetings with investors, *Journal of Law & Economics* 58, 325-355.
- Soltes, E., 2014, Private interaction between firm management and sell-side analysts, *Journal of Accounting Research* 52, 245-272.
- Srinidhi, B., S. Leung, and B. Jaggi, 2009, Differential effects of regulation FD on short- and longterm analyst forecasts, *Journal of Accounting And Public Policy* 28, 401-418.
- Wang, I. Y., 2007, Private earnings guidance and its implications for disclosure regulation,

Accounting Review 82, 1299-1332.

Yuan, Y., 2015, Market-wide attention, trading, and stock returns, *Journal of Financial Economics* 116, 548-564.

#### Table 1 Summary statistics of company visits

This table summarizes statistics on company visits to firms listed on the Shenzhen Stock Exchange (SZSE) between Jan 1, 2009, and Dec 31, 2016. We delete visits to firms listed on the China Growth Enterprise Market (GEM) section, firms in the financial industry, firms that are specially treated because of delisting risk and firms with missing control variables. We also delete visits that occur in the [-1,1] event window of earnings announcements. Panel A reports visit distribution by year. Panel B reports summary statistics on the number of visitors in each visit and visitor' visiting frequencies. Panel C reports the distribution of question types discussed in each visit. Questions are categorized into 9 types according to Han et al. (2018). Please see footnote 9 in the body of this paper for a detailed classification of question types. Type<sup>n</sup> equals 1 if question type n is discussed in a visit (n=1,2,3...9). NType is the total number of question types discussed in a visit. Panel D reports summary statistics on the content of visits after July 17, 2017. Following Piotroski et al. (2016) and Bowen et al. (2018), Positive-negative tone ratio is the number of positive phrases minus the number of negative ones, scaled by the total number of positive and negative phrases. d \*\*\* da ote o cionifi a | aval of 100% 50% ord 10/ \* \*\* . 1

٠,	т <b>~</b> ,	and ***	denote a	significance	level of	10%, 5%	%, and $1%$	o, respectively.
----	--------------	---------	----------	--------------	----------	---------	-------------	------------------

	# of visits	# of firms visited	# of sample firms	% of firms visited	# of visits per firm-year
2009	2,697	248	746	33.24%	3.62
2010	3,782	349	958	36.43%	3.95
2011	3,663	425	1,056	40.25%	3.47
2012	4,028	669	1,135	58.94%	3.56
2013	5,057	680	1,149	59.18%	4.40
2014	5,014	775	1,172	66.13%	4.28
2015	5,027	780	1,205	64.73%	4.17
2016	5,008	798	1,262	63.23%	3.29
Total:2009-2016	34,276	1,191	2,148	55.45%	3.95
2009.01.01-2012.07.17	12,818	898	1,926	46.63%	
2012.07.18-2016.12.31	21,458	1,104	1,870	59.04%	

Panel B Visitors and visiting frequency

			# of visitor	s in each visit			Days betw	ween two visits by
	Total		Institutional Investors		Analysts		the same visitor to the same firm	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Before 2012.07.17	2.95	1	2.06	1	0.88	1	239	171
After 2012.07.17	4.15	2	2.71	1	1.44	1	383	210
Total	3.74	2	2.49	1	1.25	1	330	200
After - Before	1.20***	1***	0.65***	0***	0.55***	0***	143***	39***
T-statistics	28.86		19.07		38.48		17.93	
Pearson Chi <sup>2</sup>		122.46		1075.39		435.21		63.74

#### Panel C Types of questions discussed in each visit

	Before 2012.07.17		After 2012.07.17		Total			After - Before		
	Mean	SD	Mean	SD	Mean	S	D	Difference in	Mean	t-statistics
Type <sup>1</sup>	0.9871	0.1128	0.9827	0.1302	0.9843	0.12	292	-0.0043		-1.52
Type <sup>2</sup>	0.0097	0.0978	0.0193	0.1377	0.0193	0.1	157	0.0096		3.22***
Type <sup>3</sup>	0.0069	0.0828	0.0300	0.1705	0.0300	0.14	468	0.0231		6.26***
Type⁴	0.0833	0.2764	0.2443	0.4297	0.2443	0.32	241	0.1610		17.25***
Type <sup>5</sup>	0.1583	0.3651	0.4017	0.4903	0.4017	0.4	372	0.2434		12.78***
Type <sup>6</sup>	0.0018	0.0429	0.0429	0.2026	0.0429	0.1	771	0.0410		9.43***
Type <sup>7</sup>	0.0161	0.1259	0.0575	0.2329	0.0575	0.19	983	0.0513		8.22***
Type <sup>8</sup>	0.0060	0.0771	0.1208	0.3260	0.1208	0.24	481	0.1149		16.39***
Type9	0.0432	0.2035	0.5069	0.5000	0.5069	0.39	996	0.4805		43.01***
NType	1.3126	0.6163	2.4064	1.1198	2.4064	0.9	774	1.0938		43.18***
Panel D T	he content an	d present em	ployees in ea	ch visit after	2012.07.17					
					Me	ean	SD	P25	Median	P75
# of questi	# of questions discussed				6.9	19	4.56	4	6	8
# of Chine	# of Chinese characters used in the response to a single question				15	1.58	159.07	58	105	186
Positive-ne	egative tone rat	ositive-negative tone ratio					0.251	0.145	0.501	0.744

Fositive-negative tone ratio

# of present employees

2.11

0.0776

1.10

0.2677

1

0

2

0

2

0

Presence of the chairman of the board

Presence of the vice chairman of the board	0.0111	0.1048	0	0	0
Presence of the CEO	0.0519	0.2218	0	0	0
Presence of the CFO	0.0639	0.2446	0	0	0
Presence of any top executives listed above	0.1648	0.3710	0	0	0
Presence of board secretaries	0.6162	0.4863	0	1	1
Presence of representatives for security affairs	0.3242	0.4681	0	0	1

# Table 2 Summary statistics on AN\_ABAR<sup>[0,2]</sup>

In this table, we summarize  $AN_ABAR_{i,j,q}^{[0,2]}$  and compare it among different sub-samples. In Panel A, visits are divided into two sub-samples. One sub-sample comprises visits conducted before July 17, 2012 and the other one comprises visits conducted after that. In Panels B to G, we double sort visits by sample periods and then by firm or visit characteristics.  $AN_ABAR_{i,j,q}^{[0,2]}$  is the standardized absolute cumulative abnormal returns in the three-day window ([0,2]) around visits.  $DFund_{i,j,q}$  equals 1 if at least one institutional investor attends the visit and 0 otherwise.  $DGVisit_{i,j,q}$  equals 1 if the visit is a group visit with multiple visitors and 0 otherwise.  $DeepQ_{i,j,q}$  equals 1 if deep questions are discussed during the visit and equals 0 otherwise. Deep questions are defined following Han et al. (2018).  $DManu_{i,q}$  equals 1 for visits to manufacturing firms and 0 otherwise.  $DRate_{i,q}$  equals 1 for visits to firms whose information disclosure quality are relatively poor and thus are rated as C or D by the SZSE and 0 otherwise.  $Bigevent_{i,j,q}$  equals 1 if a visit occurs in the [-5,5] event window of major corporate events such as mergers and acquisitions, seasoned equity offerings, right offerings, related party transactions, lawsuits, regulatory violations, and dividends, and 0 otherwise. T-statistics are reported in parentheses. \*, \*\*, and \*\*\* denote a significance level of 10%, 5%, and 1%, respectively.

Panel A Visits gro	uped by sample periods				
	Sample Period	(1)2009.1.1-2016.12.31	(2)Before2012.7.17	(3)After2012.7.17	(3)-(2)
	Observations	34,276	12,818	21,458	
	$Mean(AN \_ ABAR_{i,j,q}^{[0,2]})$	0.1109***	0.0712***	0.1346***	0.0634***
	t-statistics	(10.86)	(3.41)	(13.78)	(3.02)
Panel B Visits gro	ouped by sample periods a	nd by <i>DFund</i>			
	Sample Period	(1)2009.1.1-2016.12.31	(2)Before2012.7.17	(3)After2012.7.17	(3)-(2)
(1) $DFund_{i,j,q}=0$	Observations	14,396	6,175	8,221	
	$Mean(AN \_ ABAR^{[0,2]}_{i,j,q})$	0.0852***	0.0316*	0.1255***	0.0939***
	t-statistics	(4.15)	(1.83)	(7.49)	(3.08)
(2) $DFund_{i,j,q}=1$	Observations	19880	6643	13237	
	$Mean(AN \_ ABAR_{i,j,q}^{[0,2]})$	0.1295***	0.1080***	0.1403***	0.0322*
	t-statistics	(11.46)	(4.72)	(11.34)	(1.92)
(2)-(1)	$Mean(AN \_ ABAR_{i,j,q}^{[0,2]})$	0.0443**	0.0764***	0.0148	-0.0617**
	t-statistics	(2.24)	(4.07)	(0.76)	(-2.29)
Panel C Visits gro	ouped by sample periods a	nd by <i>DGVisit</i>			
	Sample Period	(1)2009.1.1-2016.12.31	(2)Before2012.7.17	(3)After2012.7.17	(3)-(2)
(1) $DGVisit_{i,j,q}=0$	Observations	15,100	5,869	9,231	
	$Mean(AN \_ ABAR_{i,j,q}^{[0,2]})$	0.0890***	0.0546**	0.1108***	0.0562***
	t-statistics	(8.21)	(2.48)	(6.78)	(2.78)
(2) $DGVisit_{i,j,q}=1$	Observations	19176	6949	12227	
	$Mean(AN \_ ABAR_{i,j,q}^{[0,2]})$	0.1282***	0.0852***	0.1526***	0.0673***
	t-statistics	(7.46)	(4.84)	(11.63)	(2.62)
(2)-(1)	$Mean(AN \_ ABAR^{[0,2]}_{i,j,q})$	0.0392*	0.0306*	0.0418**	0.0111
	t-statistics	(1.81)	(1.69)	(2.33)	(0.52)
Panel D Visits gro	ouped by sample periods a	nd by <i>DeepQ</i>			
Group	Sample Period	(1)2009.1.1-2016.12.31	(2)Before2012.7.17	(3)After2012.7.17	(3)-(2)
(1) $DeepQ_{i,j,q}=0$	Observations	13,996	9,168	4,828	
	$Mean(AN \_ ABAR^{[0,2]}_{i,j,q})$	0.0827***	0.0711**	0.1048***	0.0337*
	t-statistics	(4.58)	(1.98)	(7.34)	(1.84)

(2) $DeepQ_{i,j,q}=1$	Observations	20280	3650	16630	
	$Mean(AN \_ ABAR^{[0,2]}_{i,j,q})$	0.1303***	0.0715***	0.1433***	0.0718***
	t-statistics	(10.76)	(3.84)	(10.95)	(4.02)
(2)-(1)	$Mean(AN \_ ABAR_{i,j,q}^{[0,2]})$	0.0476**	0.0004	0.0385*	0.0381*
	t-statistics	(2.51)	(0.09)	(1.89)	(1.92)
Panel E Visits gro	uped by sample periods a	nd by <i>DManu</i>			
Group	Sample Period	(1)2009.1.1-2016.12.31	(2)Before2012.7.17	(3)After2012.7.17	(3)-(2)
(1) DManu <sub>i,q</sub> =0	Observations	10,489	4,735	5,754	
	$Mean(AN \_ ABAR_{i,j,q}^{[0,2]})$	0.0809***	0.0280	0.1244***	0.0964***
	t-statistics	(3.64)	(0.60)	(13.19)	(6.80)
(2) $DManu_{i,q}=1$	Observations	23787	8083	15704	
	$Mean(AN \_ ABAR_{i,j,q}^{[0,2]})$	0.1241***	0.0965***	0.1383***	0.0418**
	t-statistics	(11.80)	(4.87)	(11.63)	(2.18)
(2)-(1)	$Mean(AN \_ ABAR_{i,j,q}^{[0,2]})$	0.0432**	0.0685**	0.0139	-0.0546**
	t-statistics	(2.16)	(2.47)	(0.63)	(-2.41)
Panel F Visits grou	uped by sample periods a	nd by <i>DRate</i>			
Group	Sample Period	(1)2009.1.1-2016.12.31	(2)Before2012.7.17	(3)After2012.7.17	(3)-(2)
(1) $DRate_{i,q}=0$	Observations	29,228	11,346	17,882	
	$Mean(AN \_ ABAR_{i,j,q}^{[0,2]})$	0.0711***	0.0690***	0.1259***	0.0569***
	t-statistics	(10.16)	(2.81)	(6.52)	(4.31)
(2) $DRate_{i,q}=1$	Observations	5,048	1,472	3,576	
	$Mean(AN \_ ABAR_{i,j,q}^{[0,2]})$	0.1498***	0.0938***	0.1781***	0.0843***
	t-statistics	(10.06)	(2.82)	(10.19)	(5.03)
(2)-(1)	$Mean(AN \_ ABAR_{i,j,q}^{[0,2]})$	0.0787***	0.0248*	0.0522**	0.0274*
	t-statistics	(3.15)	(1.93)	(2.51)	(1.89)
Panel G Visits gro	uped by sample periods a	nd by <i>Bigevent</i>			
Group	Sample Period	(1)2009.1.1-2016.12.31	(2)Before2012.7.17	(3)After2012.7.17	(3)-(2)
(1) Bigevent <sub>i,j,q</sub> =0	Observations	33,155	12,362	20,793	
	$Mean(AN \_ ABAR^{[0,2]}_{i,j,q})$	0.1063***	0.0640***	0.1338***	0.0698**
	t-statistics	(8.55)	(2.63)	(11.23)	(2.48)
(2) Bigevent <sub>i,j,q</sub> =1	Observations	1,121	456	665	
	$Mean(AN \_ ABAR_{i,j,q}^{[0,2]})$	0.1322***	0.0987***	0.1596***	0.0609**
	t-statistics	(8.82)	(3.67)	(8.16)	(2.05)
	$M_{aan}(\Lambda N \Lambda B \Lambda P^{[0,2]})$	0.0259*	0.0347**	0.0258*	-0.0089
(2)-(1)	$Mean(AN \_ ABAR^{[0,2]}_{i,j,q})$	0.0237	0.05	0.0200	

## Table 3 The impact of the 41<sup>st</sup> memo on $AN \_ABAR_{i,i,g}^{[0,2]}$

In this table, we investigate the impact of the 41<sup>st</sup> memo on  $AN_ABAR_{i,j,q}^{[0,2]}$ . The dependent variable,  $AN_ABAR_{i,j,q}^{[0,2]}$ , is the standardized absolute cumulative abnormal returns in the three-day window ([0,2]) around visits. The independent variable of interest, DPosti, j,q, equals 1 if the visit occurs after July 17, 2012 and 0 otherwise. DFundi, j,q (DGVisit<sub>i,i,q</sub>) equals 1 if the visit is conducted by institutional investors (is a group visit with multiple visitors) and 0 otherwise, and  $DeepQ_{i,j,q}$  equals 1 if at least one deep question is asked during the visit and 0 otherwise. Deep questions are defined following Han et al. (2018). DManui,q equals 1 for visits to manufacturing firms and 0 otherwise, while DRate<sub>i,q</sub> equals 1 if the information disclosure quality of firm *i* is relatively poor and hence is rated as C or D by SZSE and 0 otherwise. *Bigevent*<sub>i,j,q</sub> equals 1 if the visit occurs in the [-5,5] event window of corporate major events such as mergers and acquisitions, seasoned equity offerings, right offerings, related party transactions, lawsuits, regulatory violations and dividends offerings, and 0 otherwise. We also control for the absolute cumulative market return (MRet) and market share turnover (MTurn) during the [0,2] visit event window, the cumulative market model adjusted return (*QRet*) and the average daily share turnover (*QTurn*) of firm i in quarter q, the cumulative market model adjusted return of firm i during the last 20 trading days before the visit (HRet20), the stock beta (Beta), institutional ownership (IO), analyst coverage (Coverage), the book-to-market ratio (BM), firm size (Size), the return on assets (ROA), the sales growth (GSales), the debt-to-asset ratio (Lev), firm age (Age) and the indicator of stateowned-enterprises (SOE). We also add the inverse Mills ratio (IMR) in all regressions to control for the possible sample selection bias. IMR is estimated based on model (7). Detailed variable definitions are reported in the appendix. Quarter and industry fixed effects are included in all regressions. The t-statistics in parentheses are based on standard errors adjusted for firm clustering. \*, \*\*, and \*\*\* denote a significance level of 10%, 5%, and 1%, respectively.

$Dep Var = AN \_ABAR_{i,j,q}^{[0,2]}$	(1)	(2)	(3)	(4)	(5)	(6)
DPost <sub>i,j,q</sub>	0.0842**	0.1037**	0.0864**	0.0985**	0.0875**	0.0889**
	(2.13)	(2.37)	(2.28)	(2.19)	(2.25)	(2.09)
$DFund_{i,j,q}$	0.0683**		0.0884**	0.0867*	0.0944**	0.0866*
	(2.05)		(2.06)	(1.93)	(2.37)	(1.94)
$DManu_{i,q}$	0.0471*	0.0481*	0.0445*	0.0415*	0.0437*	0.0478**
	(1.79)	(1.82)	(1.73)	(1.83)	(1.70)	(2.11)
$DRate_{i,q}$	0.0450**	0.0485**	0.0467**	0.0367**	0.0325*	0.0350*
	(2.32)	(2.50)	(2.37)	(2.15)	(1.91)	(1.94)
$DeepQ_{i,j,q}$	0.0333*	0.0385**	0.0410**	0.0434**	0.0435**	0.0428**
	(1.94)	(2.01)	(2.19)	(2.53)	(2.50)	(2.45)
$Bigevent_{i,j,q}$	0.1960***	0.2139***	0.1971***	0.2585***	0.2572***	0.2566***
	(5.37)	(4.50)	(5.39)	(5.40)	(5.37)	(5.36)
$DGVisit_{i,j,q}$	0.0104	0.0191	0.0106	-0.0163	-0.0169	-0.0180
	(0.57)	(0.78)	(0.58)	(-0.41)	(-0.43)	(-0.44)
$DFund_{i,j,q}*DPost_{i,j,q}$			-0.0518**			
			(-2.03)			
$DManu_{i,q}*DPost_{i,j,q}$				-0.0331**		
				(-2.08)		
$DRate_{i,q}*DPost_{i,j,q}$					0.0572***	
					(2.75)	
$DeepQ_{i,j,q}*DPost_{i,j,q}$						0.0520**
						(2.21)

$QRet_{i,q-1}$	-0.0912***	-0.0828***	-0.0847***	-0.0978***	-0.0977***	-0.0971***
	(-5.08)	(-3.46)	(-4.88)	(-4.56)	(-4.54)	(-4.48)
QTurn <sub>i,q-1</sub>	0.0160	0.0397	0.0257	0.0620	0.0579	0.0570
	(0.47)	(0.88)	(0.79)	(1.45)	(1.38)	(1.36)
$HRet20_{i,j,q}$	0.0280	0.0567	0.0386	0.0239	0.0210	0.0216
	(1.08)	(1.31)	(0.43)	(0.23)	(0.21)	(0.21)
$MRet_{i,j,q}$	1.4331***	1.1547**	0.8987**	0.9581**	0.9592**	0.9468**
	(3.01)	(2.51)	(2.13)	(2.28)	(2.28)	(2.27)
MTurn <sub>i,j,q</sub>	0.0713***	0.0706***	0.0722***	0.0788***	0.0787***	0.0792***
	(10.17)	(8.39)	(10.43)	(9.84)	(9.84)	(9.79)
$Beta_{i,j,q}$	-0.0891*	-0.1239*	-0.0998**	-0.1560**	-0.1502**	-0.1466**
	(-1.80)	(-1.92)	(-2.07)	(-2.32)	(-2.21)	(-2.16)
IO <sub>i,q-1</sub>	0.0031	0.0054	0.0019	0.0046	0.0031	0.0030
	(0.43)	(0.75)	(0.25)	(0.66)	(0.49)	(0.46)
Coverage <sub>i,q-1</sub>	-0.0325***	-0.0429***	-0.0325***	-0.0381**	-0.0372**	-0.0377**
	(-2.94)	(-2.84)	(-2.94)	(-2.47)	(-2.42)	(-2.48)
$BM_{i,q-1}$	0.0347**	0.0442**	0.0224*	0.0363**	0.0365**	0.0359**
	(2.21)	(2.34)	(1.79)	(2.38)	(2.40)	(2.36)
Size <sub>i,q-1</sub>	-0.0206**	-0.0084**	-0.0206**	-0.0164**	-0.0168**	-0.0172**
	(-2.43)	(-2.41)	(-2.47)	(-1.97)	(-1.99)	(-2.02)
$ROA_{i,q-1}$	0.1145**	0.1216**	0.1149**	0.1230**	0.1007*	0.1221**
-	(2.18)	(2.37)	(2.16)	(2.46)	(1.91)	(2.44)
GSales <sub>i,q-1</sub>	-0.0235	-0.0558	-0.0012	-0.0010	-0.0008	-0.0008
	(-0.66)	(-1.25)	(-0.36)	(-0.26)	(-0.22)	(-0.21)
Lev <sub>i,q-1</sub>	-0.0230	-0.0794	-0.0038	-0.0270	-0.0295	-0.0236
	(-0.37)	(-1.03)	(-0.06)	(-0.38)	(-0.41)	(-0.33)
$Age_{i,q-1}$	-0.0142	-0.0126	-0.0125	-0.0016	-0.0001	-0.0005
	(-0.86)	(-0.56)	(-0.75)	(-0.05)	(-0.00)	(-0.01)
$SOE_{i,q-1}$	-0.0040	-0.0304	-0.0018	0.0020	0.0009	0.0009
	(-0.19)	(-1.04)	(-0.08)	(0.07)	(0.03)	(0.03)
IMR <sub>i,q</sub>	-0.0224	0.0367	-0.0252	0.0983	0.1031	0.1091
	(-0.26)	(0.30)	(-0.29)	(0.60)	(0.62)	(0.65)
Constant	-0.4165***	-0.2946	-0.3969***	-0.5381***	-0.5381**	-0.5331***
	(-3.10)	(-1.55)	(-2.99)	(-2.62)	(-2.52)	(-2.62)
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
# of observations	34,276	14,396	34,276	34,276	34,276	34,276
$Adj-R^2$	0.0340	0.0347	0.0338	0.0369	0.0368	0.0369
F-statistics	7.60	5.88	7.33	6.49	6.59	6.53

# Table 4 The impact of the disclosure day on $AN_ABAR_{i,i,q}^n$

In this table, we examine the impact of the disclosure day on  $AN\_ABAR_{i,j,q}^n$  (n = 0, 1, 2).  $AN\_ABAR_{i,j,q}^n$  is the standardized absolute daily abnormal return on day *n*. The key independent variables are  $DPost_{i,j,q}$  and  $DDis_{i,j,q}^n$ . *DPost<sub>i,j,q</sub>* equals 1 if the *j*th visit to firm *i* in quarter *q* occurs after July 17, 2012 and 0 otherwise.  $DDis_{i,j,q}^n$  equals 1 if day *n* is the day when the *j*th visit is disclosed during the [0,2] event window and 0 otherwise. Control variables are identical to those in Table 3. Detailed variable definitions are reported in Table A3 in the appendix. Quarter and industry fixed effects are included in all regressions. Panel A uses all visits as observations and Panel B uses visits without the presence of any institutional investors as observations. The *t*-statistics in parenthesis are based on standard errors adjusted for firm clustering. \*, \*\*, and \*\*\* denote a significance level of 10%, 5%, and 1%, respectively.

$Dep Var = AN \_ABAR^n_{i,j,q}$	Panel A All visits			Panel B Visits without institutional investors		
$Dep var = AIV \_ ADAK_{i,j,q}$	(1) n=0	(2) n=1	(3) n=2	(4) n=0	(5) n=1	(6) n=2
DPost <sub>i,j,q</sub>	0.0332*	0.0548**	0.0411**	0.0350**	0.0468*	0.0343*
	(1.92)	(2.22)	(2.44)	(2.13)	(1.88)	(1.93)
$DDis_{i,j,q}^n$	0.0365**	0.0646***	0.0431***	0.0385**	0.0528*	0.0303***
	(2.36)	(2.87)	(2.86)	(2.29)	(1.90)	(3.06)
$DFund_{i,j,q}$	0.0358*	0.0486**	0.0416*			
	(1.80)	(2.42)	(1.94)			
$DManu_{i,q}$	0.0290	0.0385	0.0468*	0.0397*	0.0467*	0.0446**
	(1.29)	(1.59)	(1.94)	(1.81)	(1.94)	(2.06)
$DRate_{i,q}$	0.0398*	0.0370*	0.0412**	0.0667***	0.0434**	0.0407*
	(1.76)	(1.67)	(2.03)	(3.12)	(2.28)	(1.65)
$DeepQ_{i,j,q}$	0.0122*	0.0045	-0.0057	0.0126	-0.0020	-0.0072
	(1.77)	(0.69)	(-0.89)	(1.02)	(-0.18)	(-0.70)
Bigevent <sub>i,j,q</sub>	0.2064***	0.1499***	0.1205**	0.1305**	0.1363***	0.1510***
	(5.27)	(4.45)	(2.36)	(2.06)	(2.58)	(3.08)
$DGV isit_{i,j,q}$	0.0020	0.0303	-0.0099	0.0301	0.0197	0.0393
	(0.10)	(1.57)	(-0.51)	(0.95)	(0.64)	(1.31)
$QRet_{i,q-1}$	-0.0388**	-0.0442**	-0.0383**	-0.0483*	-0.0539*	-0.0508*
	(-2.07)	(-2.25)	(-2.15)	(-1.72)	(-1.83)	(-1.78)
QTurn <sub>i,q-1</sub>	-0.0474	-0.0386	-0.0614*	-0.1018*	-0.0582	-0.0569
	(-0.43)	(-0.20)	(-1.74)	(-1.91)	(-0.71)	(-1.11)
$HRet20_{i,j,q}$	0.0052	-0.0013	0.1745	-0.0058	0.0114	-0.0056
	(0.78)	(-0.01)	(1.43)	(-0.50)	(0.64)	(-0.03)
$MRet_{i,j,q}$	1.3259***	0.9464**	1.2060***	1.5965**	0.8406*	1.6326**
	(2.94)	(2.05)	(2.71)	(1.96)	(1.75)	(2.32)
$MTurn_{i,j,q}$	0.0392***	0.0345***	0.0312***	0.0396***	0.0352***	0.0338***
	(6.19)	(5.41)	(4.96)	(4.22)	(3.55)	(3.35)
$Beta_{i,j,q}$	-0.0754	-0.0696	-0.0720	-0.1363**	-0.1342**	-0.1534**
	(-1.41)	(-1.33)	(-1.15)	(-2.17)	(-2.39)	(-2.41)
$IO_{i,q-l}$	0.0034	0.0035	0.0012	0.0033	0.0021	0.0015
	(0.15)	(0.19)	(0.09)	(0.20)	(0.19)	(0.21)
<i>Coverage</i> <sub>i,q-1</sub>	-0.0184	-0.0123	-0.0132	-0.0492***	-0.0345**	-0.0216

	(-1.46)	(-1.06)	(-1.06)	(-2.68)	(-2.24)	(-1.63)
$BM_{i,q-1}$	0.0381**	0.0362*	0.0346**	0.0295	0.0344**	0.0350**
	(2.48)	(1.72)	(2.13)	(1.36)	(2.13)	(2.36)
Size <sub>i,q-1</sub>	-0.0257	-0.0225	-0.0220	-0.0178	-0.0233	-0.0321*
	(-1.48)	(-1.17)	(-1.12)	(-0.60)	(-0.95)	(-1.90)
$ROA_{i,q-1}$	0.0414**	0.0316*	0.0421**	0.0374**	0.0405*	0.0419**
	(2.02)	(1.89)	(2.10)	(1.92)	(1.94)	(2.00)
$GSales_{i,q-1}$	0.0313	0.0289	0.0513	0.0452	0.0847	0.0631
	(0.77)	(0.97)	(1.47)	(0.83)	(1.63)	(1.20)
Lev <sub>i,q-1</sub>	0.0400	-0.1010	-0.1125	0.0271	0.0532	-0.0157
	(0.60)	(-1.52)	(-1.60)	(0.26)	(0.52)	(-0.14)
$Age_{i,q-1}$	-0.0082	0.0062	-0.0068	-0.0142	0.0213	-0.0254
	(-0.43)	(0.36)	(-0.40)	(-0.40)	(0.73)	(-1.10)
$SOE_{i,q-1}$	0.0048	-0.0013	-0.0006	-0.0112	0.0284	0.0531
	(0.20)	(-0.06)	(-0.03)	(-0.30)	(0.72)	(1.58)
$IMR_{i,q}$	-0.1394	-0.0181	0.0880	-0.1138	-0.1009	-0.0173
	(-1.39)	(-0.20)	(0.95)	(-0.97)	(-0.66)	(-0.13)
Constant	-0.0458	-0.1223	-0.3498**	0.2585	-0.2726	-0.5005**
	(-0.29)	(-0.93)	(-2.42)	(1.21)	(-1.28)	(-2.55)
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
# of observations	34,276	34,276	34,276	14,396	14,396	14,396
$Adj-R^2$	0.0243	0.0233	0.0325	0.0323	0.0307	0.0329
F-statistics	5.31	4.61	4.74	4.90	5.12	5.17

In this table, we examine the impact of the 41 <sup>st</sup> memo on the correlation between market reactions around visits and
firms' future earnings. The dependent variable is $CAR_{i,j,q}^{[0,2]}$ , or the cumulative market model adjusted abnormal
returns over the three-day visit event window. Independent variables of main interest are DPost <sub>i,j,q</sub> , proxies for future
earnings and their interaction terms. $DPost_{i,j,q}$ equals 1 if the <i>j</i> th visit to firm <i>i</i> in quarter <i>q</i> occurs after July 17, 2012
and 0 otherwise. Future earnings are measured by either the unexpected earnings ( $UE_{i,q}$ ) or the change of return on
assets ( $dROA_{i,q}$ ). $UE_{i,q}$ is the difference between quarterly EPS in quarter q and that in quarter q-4, scaled by the
quarter-end stock price. $dROA_{i,q}$ is the difference between $ROA$ in quarter q and that in quarter q-4. Control variables
are identical to those in Table 3. Detailed variable definitions are reported in Table A3 in the appendix. Quarter and
industry fixed effects are included in all regressions. Panel A uses all visits as observations and Panel B uses visits
without the presence of institutional investors as observations. The <i>t</i> -statistics in parenthesis are based on standard
errors adjusted for firm clustering. *, **, and *** denote a significance level of 10%, 5%, and 1%, respectively.

Table 5 The impact of the 41st memo on the correlation between market reactions and future earnings news

Dep Var= $CAR_{i,j,q}^{[0,2]}$	Panel A	All visits	Panel B Visits without	t institutional investors
$Dep + ar = CAR_{i,j,q}$	(1)	(2)	(3)	(4)
DPost <sub>i,j,q</sub>	-0.0003	0.0001	-0.0002	0.0003
	(-0.25)	(0.07)	(-0.11)	(0.19)
$UE_{i,q}$	0.0226***		0.0359***	
	(2.95)		(3.21)	
UE <sub>i,q</sub> *DPost <sub>i,j,q</sub>	0.0264**		0.0419***	
	(2.51)		(2.78)	
$dROA_{i,q}$		0.0162*		0.0125*
		(1.93)		(1.80)
$dROA_{i,q}*DPost_{i,j,q}$		0.0252**		0.0304***
		(2.54)		(2.94)
DFund <sub>i,j,q</sub>	0.0014	0.0019*		
	(1.41)	(1.88)		
DManu <sub>i,q</sub>	0.0025**	0.0031**	0.0036**	0.0040**
	(2.22)	(2.05)	(2.26)	(2.40)
$DRate_{i,q}$	-0.0013	-0.0011	-0.0009	-0.0010
	(-0.98)	(-0.84)	(-0.49)	(-0.53)
$DeepQ_{i,j,q}$	0.0004	0.0004	0.0004	0.0004
	(1.14)	(1.33)	(1.25)	(1.08)
$DGV isit_{i,j,q}$	-0.0002	-0.0001	-0.0002	-0.0001
	(-0.14)	(-0.22)	(-0.18)	(-0.29)
Bigevent <sub>i,j,q</sub>	0.0023***	0.0022**	0.0025***	0.0018**
	(2.66)	(2.52)	(2.94)	(2.31)
$QRet_{i,q-1}$	-0.0075***	-0.0078***	-0.0063***	-0.0068***
	(-9.44)	(-9.58)	(-5.47)	(-5.69)
$QTurn_{i,q-1}$	0.0005	0.0001	-0.0006	-0.0007
	(0.37)	(0.09)	(-0.31)	(-0.40)
$HRet20_{i,j,q}$	0.0036	0.0045	0.0049	0.0060
	(1.29)	(1.59)	(1.08)	(1.35)
MRet <sub>i,j,q</sub>	0.0184	0.0168	0.0158	0.0106
	(1.27)	(1.18)	(0.79)	(0.54)

MTurn <sub>i,j,q</sub>	0.0303*	0.0405**	0.0410**	0.0412**
	(1.90)	(2.43)	(2.26)	(2.40)
$Beta_{i,j,q}$	-0.0014*	-0.0016**	-0.0017**	-0.0022**
	(-1.80)	(-1.97)	(-2.25)	(-2.44)
$IO_{i,q-1}$	0.0045	0.0051	0.0046	0.0055
	(0.69)	(0.82)	(0.67)	(0.70)
Coverage <sub>i,q-1</sub>	-0.0000	0.0000	-0.0000	-0.0000
	(-0.01)	(0.12)	(-0.15)	(-0.07)
BM <sub>i,q-1</sub>	0.0000	-0.0001	-0.0001	-0.0004
	(0.05)	(-0.35)	(-0.16)	(-0.73)
Size <sub>i,q-1</sub>	-0.0002	-0.0004	0.0000	-0.0001
	(-0.47)	(-0.87)	(0.07)	(-0.22)
$ROA_{i,q-1}$	0.0114**	0.0122**	0.0125**	0.0118**
	(2.46)	(2.48)	(2.21)	(2.52)
GSales <sub>i,q-1</sub>	0.0002*	0.0002*	0.0002	0.0003*
	(1.74)	(1.76)	(1.44)	(1.77)
Lev <sub>i,q-1</sub>	-0.0012	-0.0005	0.0021	0.0026
	(-0.55)	(-0.25)	(0.67)	(0.84)
Age <sub>i,q-1</sub>	0.0008	0.0008	0.0010	0.0012*
	(1.54)	(1.57)	(1.35)	(1.66)
SOE <sub>i,q-1</sub>	0.0001	0.0002	-0.0001	-0.0001
	(0.12)	(0.39)	(-0.24)	(-0.15)
IMR <sub>i,q</sub>	-0.0006	-0.0005	-0.0009	-0.0008
	(-0.19)	(-0.18)	(-0.22)	(-0.19)
Constant	-0.0057	-0.0066	-0.0117*	-0.0117*
	(-1.15)	(-1.33)	(-1.73)	(-1.73)
Quarter FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
# of observations	34,276	34,276	14,396	14,396
$Adj-R^2$	0.0300	0.0306	0.0265	0.0272
F-statistics	5.64	5.28	5.01	5.54

#### Table 6 The impact of the 41st memo on analyst-level forecast accuracy

In this table, we test whether the relative forecast accuracy of non-visiting analysts to that of visiting analysts changes after July 17, 2012.  $IAcc_{i,k,q}^{1}(IAcc_{i,k,q}^{2})$  is -1 times the absolute difference between firm *i*'s announced annual EPS and the annual EPS forecasted by analyst k in quarter q, adjusted by quarter-begin stock prices (announced annual EPS).  $RAcc_{i,k,q}$  is -1 times the difference between the forecast error of analyst k on firm i in quarter q and the mean forecast error of all analysts who cover firm i in quarter q, scaled by the mean forecast error. DIVisiti,k,q equals 1 if analyst k visits firm i less than 3 months before he/she issues the forecast report and 0 otherwise.  $DIPost_{i,k,q}$  equals 1 if analyst k issue his/her forecast report after July 17, 2012 and 0 otherwise. We identify the brokerage firm that employs analyst k and control for the number of analysts employed by the brokerage firm (BSize), the number of firms covered by the brokerage firm (BCover), the industry experience (InExp) and the firm-specific experience (*FirmExp*) of the brokerage firm in all regressions. We also control for the forecast horizon (*Horizon*) of analyst kand the indicator of local analysts (Local). Finally, we control for earnings volatility (VEPS), the indicator for negative net earnings (Loss), the number of following analysts (Coverage), the book-to-market ratio (BM), firm size (Size), firm age (Age), firm financial leverage (Lev) and the indicator for SOEs (SOE). Detailed variable definitions are reported in Table A3 in the appendix. In columns (1) and (2), we use all earnings forecasts as observations. In column (3), to investigate the impact of the 41<sup>st</sup> memo on the relative forecast accuracy across firms covered by the same analyst within the same quarter, we require that an analyst makes forecasts for both firms that he/she visits and firms that he/she does not visit in the same quarter. In column (4), to investigate the impact of the 41st memo on the relative forecast accuracy across quarters within the same analyst-firm pair, we require that an analyst not only makes forecasts for a firm after his/her visit to it in some quarters but also makes forecasts for the same firm in other quarters when he/she does not visit it. Quarter and industry fixed effects are included in all regressions. The t-statistics in parenthesis are based on standard errors adjusted for firm clustering. \*, \*\*, and \*\*\* denote a significance level of 10%, 5%, and 1%, respectively.

	Panel A Absolute	forecast accuracy	Panel B Relative forecast accuracy		
-	(1) $IAcc^{1}_{i,k,q}$	(2) $IAcc_{i,k,q}^2$	$(3) RAcc_{i,k,q}$	(4) $RAcc_{i,k,q}$	
DIPost <sub>i,k,q</sub>	0.0156***	0.2329***	0.0039	-0.0063	
	(12.18)	(5.99)	(0.33)	(-0.57)	
DIVisit <sub>i,k,q</sub>	0.0089**	0.0908**	0.2165***	0.2265***	
	(2.26)	(2.02)	(7.67)	(8.21)	
DIPosti,k,q*DIVisiti,k,q	-0.0047**	-0.0540*	-0.1212**	-0.1387***	
	(-2.19)	(-1.83)	(-2.23)	(-4.37)	
Horizon <sub>i,k,q</sub>	-0.0125***	-0.4598***	-0.4937***	-0.4888***	
	(-6.25)	(-7.62)	(-6.61)	(-7.15)	
$BSize_{k,q}$	0.0040*	0.0215**	0.0002***	0.0002**	
	(1.92)	(2.10)	(2.87)	(2.53)	
BCover <sub>k,q</sub>	-0.0000	-0.0001**	-0.0049	-0.0076*	
	(-1.56)	(-2.53)	(-1.31)	(-1.66)	
InExp <sub>k,q</sub>	-0.0004	-0.0013	0.0000	-0.0000	
	(-0.19)	(-0.56)	(0.03)	(-0.64)	
FirmExp <sub>i,k,q</sub>	0.0003**	0.0182	-0.0038	-0.0039	
	(2.17)	(1.42)	(-1.43)	(-1.60)	
Local <sub>i,k,q</sub>	0.0048**	0.4776***	0.0433***	0.0484***	
	(2.33)	(2.71)	(4.55)	(4.97)	
VEPS <sub>i,q</sub>	-0.0531***	-0.2474**	-0.0119	0.0084	

	(-8.33)	(-2.56)	(-0.62)	(0.50)
Loss <sub>i,q</sub>	-0.0152***	-0.6508***	-0.0130***	-0.0127***
	(-22.03)	(-12.81)	(-3.64)	(-3.93)
<i>Coverage</i> <sub>i,q</sub>	0.0000	-0.0022***	-0.0138*	-0.0071
	(1.44)	(-3.41)	(-1.67)	(-1.04)
$BM_{i,q}$	-0.0040***	-0.2099**	-0.0008	-0.0015
	(-4.28)	(-2.42)	(-0.18)	(-0.38)
Size <sub>i,q</sub>	0.0016***	0.1173**	0.0111***	0.0092***
	(2.75)	(2.27)	(3.68)	(3.23)
Lev <sub>i,q</sub>	-0.0198***	-1.2548***	-0.0250*	-0.0280**
	(-7.06)	(-5.16)	(-1.90)	(-2.38)
$Age_{i,q}$	0.0104***	0.1237**	0.0233***	0.0227***
	(12.52)	(2.00)	(4.79)	(5.66)
$SOE_{i,q}$	0.0045	-0.0183	0.0051	0.0011
	(0.67)	(-0.25)	(1.05)	(0.27)
Constant	0.0382***	0.5452	-2.6734***	-2.6892***
	(7.41)	(0.74)	(-4.05)	(-4.93)
Quarter FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
# of observations	130,309	130,309	100,485	111,216
$Adj-R^2$	0.4402	0.1660	0.3789	0.3648
F-statistics	101.84	51.27	315.28	337.23

### Table 7 The impact of the 41st memo on firm-level forecast accuracy

In this table, we test whether the relative forecast accuracy of firms in the treated group to that of firms in the control group changes after July 2012. Firms in the treated group are sample firms listed on SZSE. The control group comprises of firms listed on SSE and is constructed through a propensity score matching (PSM) procedure. With the one-to-one nearest-neighbor matching without replacement, each firm in the treated group is matched to a firm in the control group by their firm-year propensity scores, i.e., the predicted likelihoods of being visited in a given year.  $Acc_{i,q}^{1}$  ( $Acc_{i,q}^{2}$ ) is -1 times the absolute difference between firm *i*'s announced annual EPS and the mean of its forecasted annual EPS reported by analysts in quarter q, adjusted by quarter-begin stock prices (announced annual EPS). DTreated<sub>ia</sub> equals 1 for firms in the treated group and 0 for firms in the control group. DAPost<sub>ia</sub> equals 1 if quarter q is later than the second quarter in 2012 and 0 otherwise. For all analysts issuing earnings forecast on firm *i* in quarter q, we calculate their mean forecast horizons (*MHorion*) and control for them in all regressions. In addition, we identify brokerage firms that employ these analysts and control for the mean number of analysts employed by these brokerage firms (MBSize), the mean number of firms covered by these brokerage firms (MBCover), the mean industry experiences (MInExp) and the mean firm-specific experiences (MFirmExp) of these brokerage firms in all regressions. We also control for earnings volatility (VEPS), the indicator for negative net earnings (Loss), the number of following analysts (Coverage), the book-to-market ratio (BM), firm size (Size), firm age (Age), financial leverage (Lev) and the indicator for SOEs (SOE). Detailed variable definitions are reported in Table A3 in the appendix. Quarter and industry fixed effects are included in all regressions.  $Acc_{i,q}^1$  and  $Acc_{i,q}^2$  of firms in the treated group are calculated with forecasts by both visiting and non-visiting analysts in Panel A and are calculated with forecasts by non-visiting analysts alone in Panel B. The t-statistics in parenthesis are based on standard errors adjusted for firm clustering. \*, \*\*, and \*\*\* denote a significance level of 10%, 5%, and 1%, respectively.

	Panel A Forecast	ts by both visiting	Panel B Forecas	ts by non-visiting	
	and non-visiting	analysts	analysts alone		
	(1) $Acc^1_{i,q}$	$(2) Acc_{i,q}^2$	$(3) Acc^1_{i,q}$	$(4) Acc_{i,q}^2$	
DTreated <sub>i,q</sub>	0.0038***	-0.1603	0.0007	0.0987	
	(2.72)	(-0.81)	(0.89)	(0.70)	
DAPost <sub>i,q</sub>	0.0260***	0.9708***	0.0191***	0.8355***	
	(14.46)	(7.20)	(11.10)	(3.17)	
$DTreated_{i,q}*DAPost_{i,q}$	0.0107**	0.2912**	0.0079**	0.2243**	
	(2.43)	(2.12)	(2.36)	(2.43)	
MHorizon <sub>i,q</sub>	-0.0014	-0.0657*	-0.0018*	-0.0578	
	(-1.49)	(-1.69)	(-1.66)	(-1.48)	
MBSize <sub>i,q</sub>	0.0040**	0.0137*	0.0034*	0.0143*	
	(2.47)	(1.86)	(1.92)	(1.93)	
MBCover <sub>i,q</sub>	-0.0041	0.0115	0.0023	0.0089	
	(-0.70)	(1.03)	(0.38)	(0.76)	
MInExp <sub>i,q</sub>	0.0004	0.0056	0.0004	0.0051	
	(0.43)	(0.67)	(0.39)	(0.55)	
MFirmExp <sub>i,q</sub>	-0.0004	-0.0014	0.0001	-0.0058	
	(-0.25)	(-0.59)	(0.15)	(-1.45)	
VEPS <sub>i,q</sub>	-0.0405***	-2.3308***	-0.0343***	-1.0264***	
	(-8.27)	(-2.76)	(-4.73)	(-2.85)	
Loss <sub>i,q</sub>	-0.0272***	-1.5211***	-0.0191***	-0.9527***	

	(-21.70)	(-12.03)	(-27.87)	(-14.19)
IO <sub>i,q</sub>	0.0048*	0.7460*	0.0012	0.2642
	(1.71)	(1.94)	(0.82)	(1.36)
<i>Coverage</i> <sub>i,q</sub>	0.0080***	0.8093***	0.0012**	0.0721
	(9.71)	(7.93)	(2.53)	(1.46)
$BM_{i,q}$	-0.0031***	-0.0374	-0.0012***	-0.0109
	(-7.27)	(-1.07)	(-4.97)	(-0.57)
Size <sub>i,q</sub>	0.0070***	0.3838**	0.0034***	0.2159***
	(6.46)	(2.47)	(5.73)	(2.67)
$Age_{i,q}$	0.0148***	0.5871***	0.0071***	0.1279*
	(7.71)	(4.97)	(10.63)	(1.88)
<i>Lev</i> <sub><i>i</i>,<i>q</i></sub>	-0.0336***	-1.4012***	-0.0263***	-0.8622***
	(-6.43)	(-3.02)	(-7.04)	(-2.88)
$SOE_{i,q}$	0.0006	-0.0632	0.0004	-0.0373
	(0.93)	(-0.73)	(1.18)	(-0.91)
Constant	-0.0421***	-5.2071***	-0.0112***	-1.9669***
	(-6.67)	(-4.90)	(-3.63)	(-4.08)
Quarter FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
# of observations	33,712	33,712	31,278	31,278
Adj-R <sup>2</sup>	0.4231	0.0838	0.3781	0.0833
F-statistics	110.33	19.99	90.69	16.71

### Table 8 The impact of the 41st memo on firm-level forecast dispersion

In this table, we test whether the relative earnings forecast dispersion of firms in the treated group to that of firms in the control group changes after July 2012. Firms in the treated group are sample firms listed on SZSE. The control group comprises of firms listed on SSE and is constructed through a propensity score matching (PSM) procedure. With the one-to-one nearest-neighbor matching without replacement, each firm in the treated group is matched to a firm in the control group by their firm-year propensity scores, i.e., the predicted likelihoods of being visited in a given year.  $Disp_{i,q}$  is the standard deviation of all individual earnings forecasts made in quarter *q*.  $DTreated_{i,q}$  equals 1 for firms in the treated group and 0 for firms in the control group.  $DAPost_{i,q}$  equals 1 if quarter *q* is later than the second quarter in 2012 and 0 otherwise. We control for EPS volatility (*VEPS*), the indicator of loss (*Loss*), the change of return on assets (*dROA*), sales growth (*GSales*), the number of following analysts (*Coverage*), firm size (*Size*) and the book-to-market ratio (*BM*). Quarter and industry fixed effects are included in all regressions.  $Disp_{i,q}$  of firms in the treated group are calculated with forecasts by both visiting and non-visiting analysts in Panel A and are calculated with forecasts by non-visiting analysts alone in Panel B. The *t*-statistics in parenthesis are based on standard errors adjusted for firm clustering. \*, \*\*, and \*\*\* denote a significance level of 10%, 5%, and 1%, respectively.

	Panel A Forecasts by both visiting	Panel B Forecasts by	
Dep Var=Disp <sub>i,q</sub>	and non-visiting analysts	non-visiting analysts alone	
	(1)	(2)	
$DTreated_{i,q}$	0.0670***	0.0194*	
	(8.98)	(1.76)	
DAPost <sub>i,q</sub>	-0.0408***	-0.0459***	
	(-2.84)	(-2.92)	
$DTreated_{i,q}*DAPost_{i,q}$	-0.0168**	-0.0192**	
	(-2.45)	(-1.97)	
VEPS <sub>i,q</sub>	0.4220***	0.4126***	
	(7.54)	(5.97)	
Loss <sub>i,q</sub>	0.0517***	0.0444***	
	(9.67)	(4.98)	
$dROA_{i,q}$	0.0833***	0.0625**	
	(3.35)	(2.32)	
$GSales_{i,q}$	0.0319***	0.1068***	
	(5.34)	(3.94)	
$Coverage_{i,q}$	-0.0169***	-0.0155***	
	(-3.34)	(-2.59)	
$BM_{i,q}$	-0.0040**	-0.0037**	
	(-2.09)	(-2.23)	
Size <sub>i,q</sub>	0.0214***	0.0336***	
	(5.86)	(5.19)	
Constant	-0.0305	-0.1885***	
	(-1.13)	(-4.28)	
Quarter FE	Yes	Yes	
Industry FE	Yes	Yes	
# of observations	33,712	31,276	
Adj-R <sup>2</sup>	0.1968	0.2275	
F-statistics	51.08	19.65	

## Table 9 The impact of the 41st memo on analysts' visiting preferences

In this table, we investigate the impact of the 41st memo on analysts' visiting preferences. The dependent variable is the dummy, DIVisiti,k,q, which equals 1 if analyst k visited firm i less than 3 months before issuing a forecast for firm i in quarter q and 0 otherwise. The independent variables of interests are  $DIPost_{i,k,q}$ , indicators of visiting benefits and their interaction terms.  $DIPost_{i,k,q}$  equals 1 if analyst k issue his/her forecast report after July 17, 2012 and equals 0 otherwise. DRatei,q, DSizei,q, and DManui,q proxy for visiting benefits in columns (1), (2), and (3) of Panel A, respectively. DRate<sub>i,q</sub> equals 1 if firm i's information disclosure quality is relatively poor and hence is rated as C/D by the SZSE and 0 otherwise.  $DSize_{i,q}$  equals 1 if the floating market capitalization of firm *i* is larger than the sample median in quarter q and 0 otherwise.  $DManu_{i,q}$  equals 1 if firm i is in the manufacturing industry and equals 0 otherwise. We control for the set of explanatory variables in model (7). In addition, we identify the brokerage firm that employs analyst k and control for the number of analysts employed by the brokerage firm (BSize), the number of firms covered by the brokerage firm (BCover), the industry experience (InExp) and the firm-specific experience (FirmExp) of the brokerage firm in all regressions. We also control for the forecast horizon (Horizon) of analyst k and the indicator of local analysts (Local). Quarter and industry fixed effects are included in all regressions. In Panel A, we report the average marginal effects of variables and their z-statistics. Average marginal effects of the interaction terms are corrected following Ai and Norton (2003). We report statistics on the marginal effects of these interaction terms in Panel B. The z-statistics in parenthesis are based on standard errors adjusted for firm clustering. \*, \*\*, and \*\*\* denote a significance level of 10%, 5%, and 1%, respectively.

Panel A Regression results Dep Var= DIVisit <sub>i.k.q</sub>	(1)	(2)	(3)
$DIPost_{i,k,q}$	0.0127	0.0127	0.0135
1. ev.e.	(0.93)	(0.96)	(1.07)
DManu <sub>i,q</sub>	0.0505***	0.0491***	0.0488***
	(5.03)	(4.27)	(4.09)
$DRate_{i,q}$	0.0610***	0.0622***	0.0615***
	(3.91)	(4.47)	(3.95)
$DSize_{i,q}$	0.0544**	0.0472**	0.0490**
	(2.21)	(2.15)	(2.41)
$DManu_{i,q}*DIPost_{i,k,q}$	0.0385**		
	(2.21)		
$DRate_{i,q}*DIPost_{i,k,q}$		0.0433**	
		(2.49)	
$DSize_{i,q}*DIPost_{i,k,q}$			0.0355*
			(1.93)
Control	YES	YES	YES
Quarter FE	YES	YES	YES
Year FE	YES	YES	YES
# of observations	130,309	130,309	130,309
Pseudo R <sup>2</sup>	0.0360	0.0361	0.0359
Wald chi <sup>2</sup>	367.31	368.06	369.75
Prob> Chi <sup>2</sup>	0.0000	0.0000	0.0000

Panel B Statistics regarding the average marginal effect of interaction terms

	$DManu_{i,q}*DIPost_{i,k,q}$		$DRate_{i,q}*DIPost_{i,k,q}$		$DSize_{i,q}*DIPost_{i,k,q}$				
	Effect	SE	Z-statistics	Effect	SE	Z-statistics	Effect	SE	Z-statistics
Mean	0.0385	0.0169	2.2147	0.0433	0.0177	2.4861	0.0355	0.0189	1.9284
SD	0.0079	0.0033	0.2450	0.0104	0.0032	0.3337	0.0097	0.0034	0.3393
Min	0.0102	0.0049	1.0257	0.0074	0.0031	0.7021	0.0012	0.0003	0.4899
Max	0.0614	0.0904	4.0172	0.0703	0.0817	4.2974	0.0691	0.1007	3.7644

#### Table 10 The Impact of the 41st memo on firms' likelihoods of being visited

In this table, we examine the impact of the  $41^{st}$  memo on firms' likelihoods of being visited by analysts. *DAVisiti,q* equals 1 if firm *i* is visited by analysts at least once in quarter *q* and equals 0 otherwise. Independent variables of interests are *DAPosti,q*, indicators of visiting benefits and their interactions. *DAPosti,q* is a dummy which equals 1 for quarters later than the second quarter of 2012 and 0 otherwise. *DRate<sub>i,q</sub>*, *DSize<sub>i,q</sub>*, and *DManu<sub>i,q</sub>* proxy for visiting benefits in columns (1), (2), and (3), respectively. *DRate<sub>i,q</sub>* equals 1 if firm i's information disclosure quality is relatively poor and thus is rated as C/D by the SZSE and 0 otherwise. *DSize<sub>i,q</sub>* equals 1 if the floating market capitalization of firm *i* is larger than the sample median in quarter *q* and 0 otherwise. *DManu<sub>i,q</sub>* equals 1 if firm *i* is in the manufacturing industry and 0 otherwise. We use the set of explanatory variables in model (7) as control variables in this table. Quarter and industry fixed effects are included in all regressions. In Panel A, we report the average marginal effects of variables and their z-statistics on the marginal effects of these interaction terms are corrected following Ai and Norton (2003). In Panel B, we report statistics on the marginal effects of these interaction terms are a significance level of 10%, 5%, and 1%, respectively.

Panel A Regression results			
$Dep Var=DAVisit_{i,q}$	(1)	(2)	(3)
DAPost <sub>i,q</sub>	-0.1288**	-0.1063*	-0.1068*
	(-2.26)	(-1.86)	(-1.94)
$DManu_{i,q}$	0.0740***	0.0807***	0.0839***
	(4.20)	(3.02)	(3.07)
$DRate_{i,q}$	0.0619**	0.0638**	0.0582**
	(2.15)	(2.48)	(2.03)
$DSize_{i,q}$	0.0444*	0.0451*	0.0410*
	(1.92)	(1.86)	(1.86)
DManu <sub>i,q</sub> *DAPost <sub>i,q</sub>	0.0570**		
	(2.17)		
$DRate_{i,q}*DAPost_{i,q}$		0.0585***	
		(2.97)	
$DSize_{i,q}*DAPost_{i,q}$			0.0282*
			(1.71)
Control	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
# of observations	26,208	26,208	26,208
Pseudo R <sup>2</sup>	0.1399	0.1383	0.1370
Wald chi <sup>2</sup>	593.85	587.12	1119.13
Prob> Chi <sup>2</sup>	0.0000	0.0000	0.0000

Panel B Statistics regarding the marginal effect of interaction terms

	$DManu_{i,q}*DAPost_{i,q}$		D	$DRate_{i,q}$ *DAPost_{i,q}		$DSize_{i,q}*DAPost_{i,q}$			
-	Effect	SE	Z-statistics	Effect	SE	Z-statistics	Effect	SE	Z-statistics
Mean	0.0570	0.0271	2.1691	0.0585	0.0214	2.9685	0.0282	0.0155	1.7144
SD	0.0107	0.0045	0.4732	0.0119	0.0021	0.4093	0.0094	0.0031	0.4251
Min	0.0128	0.0119	0.5183	0.0108	0.0138	1.4975	0.0007	0.0024	0.4119
Max	0.0915	0.0557	3.8775	0.1161	0.0962	4.3087	0.0610	0.0351	2.6974

## Table 11 The Impact of the 41st memo on visiting frequencies

In this table, we examine the impact of the 41st memo on frequencies by which firms are visited by analysts.  $NVisit_{i,q}$  is the natural logarithm of 1 plus the number of visits by analysts to firm *i* in quarter *q*. The main independent variables of interests are  $DAPost_{i,q}$ , indicators of visiting benefits and their interaction terms.  $DAPost_{i,q}$  is a dummy which equals 1 for quarters later than the second quarter of 2012 and 0 otherwise.  $DRate_{i,q}$ ,  $DSize_{i,q}$ , and  $DManu_{i,q}$  proxy for visiting benefits in columns (1), (2), and (3), respectively.  $DRate_{i,q}$  equals 1 if firm i's information disclosure quality is relatively poor and thus is rated as C/D by the SZSE and equal 0 otherwise.  $DSize_{i,q}$  equals 1 if the floating market capitalization of firm *i* in quarter *q* is larger than the sample median in quarter *q* and equals 0 otherwise.  $DManu_{i,q}$  equals 1 if firm *i* is in the manufacturing industry and 0 otherwise. We use the set of explanatory variables in model (7) as control variables in this table. Quarter and industry fixed effects are included in all regressions. The *t*-statistics in parenthesis are based on standard errors adjusted for firm clustering. \*, \*\*, and \*\*\* denote a significance level of 10%, 5%, and 1%, respectively.

$Dep Var = NVisit_{i,q}$	(1)	(2)	(3)
DAPost <sub>i,q</sub>	-0.0744	-0.0805	-0.0840
	(-1.19)	(-1.30)	(-1.52)
$DManu_{i,q}$	0.1019**	0.1267***	0.1082**
	(2.16)	(2.63)	(2.25)
$DRate_{i,q}$	0.1387***	0.1218***	0.1307***
	(5.08)	(5.44)	(5.39)
DSize <sub>i,q</sub>	0.0773*	0.0790*	0.0771*
	(1.87)	(1.93)	(1.85)
DManui,q*DAPosti,q	0.0613*		
	(1.83)		
$DRate_{i,q}*DAPost_{i,q}$		0.0771**	
		(2.49)	
DSize <sub>i,q</sub> *DAPost <sub>i,q</sub>			0.0691*
			(1.72)
Control	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
# of observations	26,208	26,208	26,208
$Adj-R^2$	0.1879	0.1856	0.1858
F-statistics	28.36	28.25	29.83

# Appendix

Table A1 Investor relationship activities of Guangdong Provincial Expressway	

Date	Location	Type of activities	Participants	Question discussed
2010 .04.08	Company	Company visits	Analysts of GUOTAI JUNAN	(1) Traffic and toll fees of
	Headquarter		securities;	expressways controlled or
			Senior analysts of China Southern	invested by GEPD.
			Asset Management;	(2) Main business sectors and
			Analysts of Franklin Templeton	their operations in 2010.
			Sealand Fund.	(3) Difficulties faced and
2010.04.21	Company	Company visits	Fund manager of Hachiman Capital	solutions.
	Headquarter		Singapore.	(4) Investments of the firm.
2010.11.11	Company	Company visits	Senior manager of research	(5) Progress of the firm's
	Headquarter		department of CITIC Securities.	operation plan.
2010.11.28	Company	Company visits	Analysts of research department of	(6) Future development
	Headquarter		China International Capital	strategy of the firm.
			Corporation Ltd.	

# Development Co. Ltd (GEPD) in 2010

Table A2 Investor relationship record of GEPD on March 31st, 2016

	P	record of GET D on Watch 51, 2010		
Type of investor	☑ Visit by special entities	Analysts Meeting		
relationship	Media interview	Earnings announcement meeting		
activities	□ News release	□ Roadshow		
	□ Site tour			
	$\Box$ Other (please describe it here)	ere)		
Participants	Ping Peng, Manager of Taikang	g Asset Mangement Co., LTD;		
	Gao Chuanlun, Manager of ass	set management department, Guangzhou Securities;		
	Feng Chao, Senior analyst of E	Beijing Hong Dao investment management;		
	Luo Ding, Analyst of CITIC se	ecurity in the transportation industry.		
Time	14:00-15:30 P.M, on March 31	<sup>st</sup> 2016.		
Location	Meeting room of the firm.			
Present employee of	Zuo Jiang, vice president and b	board secretary.		
the firm	Liang Jirong, vice chief of the	security department.		
	Zhao Juan, manager of the secu	urity department.		
	Question: Are the firm's ex	pressway projects affected by the planning on new		
	expressways of Guangdong p	province?		
	Answer: Judging from the pla	anning, new expressways would not affect expressways		
	controlled or invested by the fir	rm.		
	Question: Will the traffic and	d toll fees of the firm's expressways keep increasing in		
	three to five years?			
	Answer: We expect a 5%-10%	b traffic increase for most of the firm's expressways. The		
	-	Pearl River Delta such as the development of logistics base		
		integration of Guangzhou, Foshan and Zhaoqing, and the		
		of local citizens are all positive factors for the increase of		
	expressway traffic.			
	Question: What is the purpos	se of Fosun International Limited's participating in the		
	firm's private equity placeme			
		ows because of its "insurance plus investment" operation		
Contents		n trying establishing a better industrial platform in the		
		sitions of the logistics business of CAINIAO and Yunda		
		with expressway networks that GPED owns. GPED has		
		olicies on the SOE reform in Guangdong province is about		
	_	vestment in GPED meets the standards of Fosun as a safe		
	investment.			
		ructuring and equity financing complete?		
		ulatory requirements, the time of equity financing should		
	be differentiated with that of the dividend payout. Since the firm has announced the			
		ivery restructured assets and issue equity after the dividend		
	of 2015 is paid out.			
	_	ss of the application on operation period re-ratifying of		
	GuangFo expressway after it			
		re-ratify the operation period of GuangFo expressway		
		the Expansion of Expressways" issued by the Department		

	of Transportation of Guangdong Province. Now the appraisal reports are reported to the
	related government department for approval.
	Question: What's the dividend payout plan in the future?
	Answer: The firm will try best to increase the dividend payout ratio as the firm's assets
	and profitability increase.
	Question: Will the firm consider an equity incentive plan?
	Answer: The firm is gradually establishing a scientific, market-oriented incentive
	mechanism, reforming the current compensation and evaluation system and exploring an
	intermediate and long term incentive mechanism which includes an equity incentive plan,
	or the employee stock ownership plan.
	Question: What is the direction of the firm's future transformation?
	Answer: The firm will extend its investment based on current diversified investments.
	One direction is the investment in the finance sector, and another direction involves smart
	transportation and vehicle post-services.
Attachments (If any)	No attachments
Date	March 31, 2016.

# **Table A3 Variable Definitions**

$\frac{\text{Market reaction}}{AN \_ ABAR_{i,i,a}^{[0,2]}}$	Standardized absolute cumulative abnormal returns in the three-day window $([0,2])$ arou
$ADAK_{i,j,q}$	visits, that is, the difference between the absolute three-day cumulative market model adjust
	returns in visit event window $([0,2])$ and the mean of 80 absolute three-day cumulative market model adjust
	model adjusted abnormal returns in the normal period ( $[-240, -1]$ ), scaled by the standard
	deviation of these returns. Day 0 is the visit day. The market model is estimated with the 1
	240 daily returns in a rolling manner.
$AN \_ ABAR_{i, i, q}^n$	Standardized absolute daily abnormal return on day $n$ , that is, the difference between t
In _ In _ i, j,q	absolute daily market model adjusted abnormal return on day <i>n</i> and the mean of absolute da
	market model adjusted abnormal returns in the normal period ([-240, -1]), scaled by t
	standard deviation of these returns in the normal period. $n = 0, 1, 2$ .
$CAR_{i,j,q}^{[0,2]}$	Cumulative market model adjusted abnormal returns over the [0, 2] visit event window.
	ling the 41 <sup>st</sup> memo
$DDis_{i,j,q}^n$	Dummy that equals 1 if day $n$ is the disclosure day for the $j_{th}$ visit to firm $i$ in quarter $q$ a
1, J, q	equals 0 otherwise. $n = 0, 1, 2$ . Day 0 is the visit day.
DAPost <sub>i,q</sub>	Dummy that equals 1 if quarter $q$ is later than the second quarter in 2012 and 0 otherwise.
DPost <sub>i,j,q</sub>	Dummy that equals 1 if the $j_{th}$ visit to firm $i$ in quarter $q$ occurs after July 17, 2012 and
	otherwise.
Visit Characteri	
Bigevent <sub>i,j,q</sub>	Dummy that equals 1 if the visit is conducted between the [-5, 5] event window of a corpor
5	major event of firm <i>i</i> . Corporate major events are defined following Cheng et al. (2019).
$DeepQ_{i,j,q}$	Dummy that equals 1 if deep questions are asked during the visit and 0 otherwise. Question
	are divided into deep questions and non-deep ones according to Han (2018).
DFund <sub>i,j,q</sub>	Dummy that equals 1 if at least one visitor of the $j_{th}$ visit to firm <i>i</i> in quarter <i>q</i> is an institution investor and 0 at hereing
DCVisit	investor and 0 otherwise.
DGVisit <sub>i,j,q</sub> HRet20 <sub>i,j,q</sub>	Dummy that equals 1 for a visit with multiple visitors and equals 0 otherwise. Absolute cumulative market model adjusted abnormal return of firm $i$ during the last
$III (ei 20_{i,j,q})$	Absolute cumulative market model adjusted abnormal return of mini $t$ during the last trading days before the $j_{th}$ visit in quarter $q$ .
1.00	Absolute cumulative market return in the three-day ([0,2]) event window of the $j_{th}$ visit to fi
$MRet_{i,j,q}$	<i>i</i> in quarter $q$ .
MTurn <sub>i, j, q</sub>	Market turnover in the three-day ([0,2]) event window of the $j_{th}$ visit to firm <i>i</i> in quarter <i>q</i> .
NType <sub>i,j,q</sub>	The total number of question types discussed in the $j_{th}$ visit.
$PNR_{i,j,q}$	Positive-negative tone ratio, that is, the number of positive phrases in the visit disclosure rep
	minus the number of negative ones, scaled by the total number of positive and negative
	phrases.
$Type_{i,j,q}^n$	Dummy that equals 1 if question type $n$ is discussed in the $j_{th}$ visit and equals 0 otherw
$\mathcal{F} = i, j, q$	(n=1,2,39). Questions are categorized into 9 types according to Han et al. (2018).
Firm Character	
Age <sub>i,q</sub>	Natural logarithm of years for which firm <i>i</i> has been listing.
$Beta_{i,j,q}$	The sensitivity of excess daily return on firm <i>i</i> to that on the market portfolio in the last 2
D1 (	trading days before the $j_{th}$ visit in quarter $q$ .
$BM_{i,q}$	Equity book value divided by equity market value at the end of quarter $q$ .
$Coverage_{i,q}$	Natural logarithm of 1 plus the number of analysts issuing earnings forecast reports for firm
D AVigit.	in quarter $q$ . Dummy that equals 1 if firm $i$ is visited by analysts at least once in quarter $q$ and 0 otherwi
DAVisit <sub>i,q</sub> DManu	Dummy that equals 1 if firm $i$ is in the manufacturing industry according to the industry
DManu <sub>i,q</sub>	classifications of the CSRC and 0 otherwise.
$DRate_{i,q}$	Dummy that equals 1 if the information disclosure quality of firm <i>i</i> is relatively poor and the
LAUIC 1,q	is rated as C or D by the SZSE and 0 otherwise.
$dROA_{i,q}$	The difference between $ROA$ in quarter $q$ and that of quarter $q$ -4.
$DSize_{i,q}$	Dummy that equals 1 if firm <i>i</i> 's market capitalization is larger than sample median in quar
~~~ <i>~~~</i> ,,q	q and 0 otherwise.
	Dummy that equals 1 if firm <i>i</i> is in the treated group and 0 otherwise.
DTreated: "	
-	
DTreated <sub>i,q</sub> DVisit <sub>i,q</sub>	Dummy that equals 1 if firm <i>i</i> is visited by analysts or institutional investors at least once quarter $q$ and 0 otherwise.

$IO_{i,q}$	Institutional ownership of firm $i$ by the end of quarter $q$ .
$GSales_{i,q}$	Growth of sales in quarter $q$ relative to sales in quarter $q$ -4.
$Lev_{i,q}$	Long-term debt divided by total assets by the end of quarter $q$ .
$Loss_{i,q}$	Dummy that equals 1 if the net earnings of firm $i$ in quarter $q$ is negative and 0 otherwise.
$MBSize_{i,q}$	The mean $BSize$ of all brokerage firms that cover firm <i>i</i> in quarter <i>q</i> .
<i>MBCover<sub>i,q</sub></i>	The mean <i>BCover</i> of all brokerage firms that cover firm <i>i</i> in quarter <i>q</i> .
MFirmExp <sub>i,q</sub>	The mean <i>FirmExp</i> of all brokerage firms that cover firm <i>i</i> in quarter <i>q</i> .
MHorizon <sub>i,q</sub>	The mean <i>Horizon</i> of all analysts that cover firm $i$ in quarter $q$ .
MInExp <sub>i,q</sub>	The mean <i>InExp</i> of all brokerage firms that cover firm <i>i</i> in quarter $q$ .
$MShare_{i,q}$	The sales share of firm <i>i</i> in the sum of sales of all listed firms with the same two-digit CSRO
	industry code in quarter $q$ .
$NSeg_{i,q}$	Natural logarithm of 1 plus the number of business segments of firm <i>i</i> in quarter <i>q</i> .
NVisit <sub>i,q</sub>	The number of times for which firm <i>i</i> is visited in quarter <i>q</i> .
$ROA_{i,q}$	Operating income in quarter $q$ divided by quarter-begin total assets.
$QRet_{i,q}$	The cumulative market model adjusted return of firm <i>i</i> in quarter <i>q</i> .
$QTurn_{i,q}$	Average daily share turnover of firm $i$ in quarter $q$ .
Size <sub>i,q</sub>	Natural logarithm of the floating market capitalization of firm $i$ (in billion yuan) at the end of
512,01,q	quarter q.
$SOE_{i,q}$	Dummy that equals 1 for state-owned-enterprises and 0 otherwise.
$UE_{i,q}$	Unexpected earnings, that is, the difference between quarterly EPS in quarter $q$ and that $q$
	quarter $q$ -4, scaled by quarter-end stock prices.
$UEVisit_{i,q}$	Unexpected visits, that is, the number of visits to firm <i>i</i> in quarter <i>q</i> minus that in quarter <i>q</i> -
	scaled by the 1 plus the standard deviation of the number of visits in the last four quarters.
VEPS <sub>i,q</sub>	The standard deviation of the last 4 quarterly EPS of firm <i>i</i> .
*	rage Firm Characteristics
$BSize_{k,q}$	Natural logarithm of the number of analysts employed by the brokerage firm that employ
DC	analyst $k$ in quarter $q$ .
BCover <sub>k,q</sub>	Natural logarithm of the number of firms covered by the brokerage firm that employs analy. <i>k</i> .
$DIPost_{i,k,q}$	Dummy that equals 1 if analyst k issues a forecast after July 17, 2012 and equals 0 otherwise
$DIVisit_{i,k,q}$	Dummy that equals 1 if analyst k visits firm $i$ less than 3 months before issuing a forecast of
<i>Б</i> 17 <i>15111,к,</i> q	firm <i>i</i> and 0 otherwise.
FirmExp <sub>i,k,q</sub>	Natural logarithm of years after the brokerage firm that employs analyst $k$ issues the fir
Г итЕлр <sub>і,к,q</sub>	forecast report on firm <i>i</i> .
Horizon <sub>i,k,q</sub>	Natural logarithm of 1 plus the number of days between the day when analyst $k$ issues a
	earnings forecast for firm <i>i</i> and the day when firm <i>i</i> 's earnings is announced.
$InExp_{k,q}$	Natural logarithm of years after the establishment of the brokerage firm that employs analy
n, y	k.
Local <sub>i,k,q</sub>	Dummy that equals 1 if the headquarter of the brokerage firm that employs analyst $k$ and the
	headquarter of firm <i>i</i> are located in the same city and 0 otherwise.
Analyst forecast	
$Acc^{1}_{i,q}$	-1 times the absolute difference between firm i's announced annual EPS and the mea
	forecasted annual EPS reported by analysts in quarter $q$ , scaled by quarter-begin stock price
$Acc_{i,a}^2$	-1 times the absolute difference between firm i's announced annual EPS and the mea
$Acc_{i,q}^2$	-1 times the absolute difference between firm <i>i</i> 's announced annual EPS and the mea forecasted annual EPS reported by analysts in quarter <i>q</i> , scaled by announced annual EPS.
Disp <sub>i,q</sub>	
	forecasted annual EPS reported by analysts in quarter $q$ , scaled by announced annual EPS. The standard deviation of individual earnings forecasts made in quarter $q$ . -1 times the absolute difference between the annual EPS forecasted by analyst $k$ in quarter
$Disp_{i,q}$ $IAcc^{1}_{i,k,q}$	forecasted annual EPS reported by analysts in quarter $q$ , scaled by announced annual EPS. The standard deviation of individual earnings forecasts made in quarter $q$ . -1 times the absolute difference between the annual EPS forecasted by analyst $k$ in quarter and the announced annual EPS of firm $i$ , scaled by quarter-begin stock prices.
Disp <sub>i,q</sub>	forecasted annual EPS reported by analysts in quarter $q$ , scaled by announced annual EPS. The standard deviation of individual earnings forecasts made in quarter $q$ . -1 times the absolute difference between the annual EPS forecasted by analyst $k$ in quarter and the announced annual EPS of firm $i$ , scaled by quarter-begin stock prices. -1 times the absolute difference between the annual EPS forecasted by analyst $k$ in quarter
$Disp_{i,q}$ $IAcc^{1}_{i,k,q}$ $IAcc^{2}_{i,k,q}$	<ul> <li>forecasted annual EPS reported by analysts in quarter q, scaled by announced annual EPS.</li> <li>The standard deviation of individual earnings forecasts made in quarter q.</li> <li>-1 times the absolute difference between the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by quarter-begin stock prices.</li> <li>-1 times the absolute difference between the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by the announced annual EPS.</li> </ul>
$Disp_{i,q}$ $IAcc^{1}_{i,k,q}$ $IAcc^{2}_{i,k,q}$	<ul> <li>forecasted annual EPS reported by analysts in quarter q, scaled by announced annual EPS.</li> <li>The standard deviation of individual earnings forecasts made in quarter q.</li> <li>-1 times the absolute difference between the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by quarter-begin stock prices.</li> <li>-1 times the absolute difference between the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by the announced annual EPS.</li> <li>-1 times the difference between the forecast error of analyst k for firm i in quarter q and the annual EPS.</li> </ul>
$Disp_{i,q}$ $IAcc^{1}_{i,k,q}$ $IAcc^{2}_{i,k,q}$	<ul> <li>forecasted annual EPS reported by analysts in quarter q, scaled by announced annual EPS.</li> <li>The standard deviation of individual earnings forecasts made in quarter q.</li> <li>-1 times the absolute difference between the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by quarter-begin stock prices.</li> <li>-1 times the absolute difference between the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by the announced annual EPS.</li> <li>-1 times the difference between the forecast error of analyst k for firm i in quarter q and the mean forecast error of all analysts covering firm i in quarter q, scaled by the mean forecast</li> </ul>
$Disp_{i,q}$ $IAcc^{1}_{i,k,q}$ $IAcc^{2}_{i,k,q}$ $RAcc_{i,k,q}$	<ul> <li>forecasted annual EPS reported by analysts in quarter q, scaled by announced annual EPS.</li> <li>The standard deviation of individual earnings forecasts made in quarter q.</li> <li>-1 times the absolute difference between the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by quarter-begin stock prices.</li> <li>-1 times the absolute difference between the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by the announced annual EPS.</li> <li>-1 times the difference between the forecast error of analyst k for firm i in quarter q and th mean forecast error of all analysts covering firm i in quarter q, scaled by the mean forecast error.</li> </ul>
$Disp_{i,q}$ $IAcc^{1}_{i,k,q}$ $IAcc^{2}_{i,k,q}$ $RAcc_{i,k,q}$ City-level varial	<ul> <li>forecasted annual EPS reported by analysts in quarter q, scaled by announced annual EPS. The standard deviation of individual earnings forecasts made in quarter q.</li> <li>-1 times the absolute difference between the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by quarter-begin stock prices.</li> <li>-1 times the absolute difference between the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by the announced annual EPS.</li> <li>-1 times the difference between the forecast error of analyst k for firm i in quarter q and th mean forecast error of all analysts covering firm i in quarter q, scaled by the mean foreca error.</li> </ul>
$Disp_{i,q}$ $IAcc^{1}_{i,k,q}$ $IAcc^{2}_{i,k,q}$ $RAcc_{i,k,q}$	<ul> <li>forecasted annual EPS reported by analysts in quarter q, scaled by announced annual EPS. The standard deviation of individual earnings forecasts made in quarter q.</li> <li>-1 times the absolute difference between the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by quarter-begin stock prices.</li> <li>-1 times the absolute difference between the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by the announced annual EPS.</li> <li>-1 times the difference between the forecast error of analyst k for firm i in quarter q and th mean forecast error of all analysts covering firm i in quarter q, scaled by the mean foreca error.</li> <li>bles</li> <li>Natural logarithm of the number of listed firms in the city where firm i's headquarter</li> </ul>
$Disp_{i,q}$ $IAcc^{1}_{i,k,q}$ $IAcc^{2}_{i,k,q}$ $RAcc_{i,k,q}$ City-level varial	<ul> <li>forecasted annual EPS reported by analysts in quarter q, scaled by announced annual EPS. The standard deviation of individual earnings forecasts made in quarter q.</li> <li>-1 times the absolute difference between the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by quarter-begin stock prices.</li> <li>-1 times the absolute difference between the annual EPS forecasted by analyst k in quarter and the announced annual EPS of firm i, scaled by the announced annual EPS.</li> <li>-1 times the difference between the forecast error of analyst k for firm i in quarter q and the mean forecast error of all analysts covering firm i in quarter q, scaled by the mean forecast error.</li> </ul>

# **Table A4 Summary Statistics**

In this table, we report summary statistics on main variables used in this study. Detailed variable definitions are reported in Table A3.

reported in Table A3.											
	# of Obs	Mean	SD	P25	Median	P75					
$AN\_ABAR^{[0,2]}_{i,j,q}$	34,276	0.1109	1.2225	-0.7406	-0.2318	0.5652					
$AN\_ABAR^0_{i,j,q}$	34,276	0.0877	-0.6425	-0.2277	0.5123	1.1851					
$AN\_ABAR^1_{i,j,q}$	34,276	0.0762	-0.5433	-0.1828	0.5055	1.1389					
$AN \_ ABAR_{i,j,q}^2$	34,276	0.0439	-0.4565	-0.1650	0.4575	1.2753					
$CAR^{[0,2]}_{i,j,q}$	34,276	0.0024	0.0435	-0.0221	-0.0016	0.0213					
Variables regarding the 41 <sup>st</sup> memo											
$DDis^0_{i,j,q}$	34,276	0.1346	0.2228	0	0	1					
$DDis^{1}_{i,j,q}$	34,276	0.3051	0.3789	0	0	1					
$DDis_{i,j,q}^2$	34,276	0.1863	0.2640	0	0	1					
DAPost <sub>i,q</sub>	33,712	0.5575	0.4982	0	1	1					
DPost <sub>i,j,q</sub>	34,276	0.6260	0.4886	0	1	1					
Visit Characteristics											
Bigevent <sub>i,j,q</sub>	34,276	0.0327	0.1120	0	0	0					
$DeepQ_{i,j,q}$	34,276	0.5917	0.4992	0	1	1					
$DFund_{i,j,q}$	34,276	0.5799	0.4915	0	1	1					
$DGV isit_{i,j,q}$	34,276	0.5595	0.4610	0	1	1					
$HRet20_{i,j,q}$	34,276	0.0781	0.0760	0.0253	0.0562	0.1037					
$MRet_{i,j,q}$	34,276	0.0242	0.0209	0.0091	0.0188	0.0331					
$MTurn_{i,j,q}$	34,276	0.0432	0.0245	0.0249	0.0344	0.0558					
Firm Characteristics											
$Age_{i,q}$	26,208	1.7898	0.8947	1.0986	1.7918	2.6391					
$Beta_{i,j,q}$	34,276	1.0601	0.2013	0.9346	1.0733	1.1998					
$BM_{i,q}$	33,712	0.8110	0.7279	0.3544	0.5741	0.9852					
<i>Coverage</i> <sub>i,q</sub>	33,712	1.7007	1.1105	1.0094	1.7650	2.4001					
$DAV isit_{i,q}$	26,208	0.3789	0.4051	0	0	1					
DManu <sub>i,q</sub>	34,276	0.6366	0.4810	0	1	1					
$DRate_{i,q}$	26,208	0.1473	0.2139	0	0	0					
$dROA_{i,q}$	33,712	-0.0016	0.0258	-0.0146	-0.0007	0.0119					
DSize <sub>i,q</sub>	26,208	0.5013	0.4998	0	1	1					
$DTreated_{i,q}$	33,712	0.4998	0.4911	0	0	1					
$DVisit_{i,q}$	26,208	0.4878	0.4999	0	0	1					
IMR <sub>i,q</sub>	18,896	0.4824	0.2121	0.3264	0.4520	0.6117					
IO <sub>i,q</sub>	33,712	0.1616	0.1504	0.0505	0.1122	0.2227					
$GSales_{i,q}$	33,712	0.1617	0.2617	0.0278	0.0814	0.1798					
Lev <sub>i,q</sub>	33,712	0.4910	0.3650	0.3259	0.4880	0.6445					
$Loss_{i,q}$	33,712	0.0389	0.1533	0	0	0					
MBSize <sub>i,q</sub>	33,712	3.4784	0.7611	3.0784	3.6559	3.9185					
MBCover <sub>i,q</sub>	33,712	5.2745	0.8159	4.7128	5.4991	5.8254					
MFirmExp <sub>i,q</sub> MHorizon	33,712	1.7710	0.1558	1.6945	1.8442	1.9668					
MHorizon <sub>i,q</sub>	33,712	4.7025	0.8812	4.3118	5.0983	5.5005					

$MInExp_{i,q}$	33,712	2.2915	0.8446	2.1679	2.5514	3.1525			
$MShare_{i,q}$	26,208	0.0467	0.0779	0.0023	0.0065	0.0310			
NSeg <sub>i,q</sub>	26,208	0.7979	0.4964	0.6931	1.0986	1.3863			
NVisit <sub>i,q</sub>	26,208	0.4418	0.5724	0	0	0.6931			
$ROA_{i,q}$	26,208	0.0469	0.0538	0.0172	0.0416	0.0727			
$QRet_{i,q}$	26,208	0.0514	0.1405	-0.0258	0.0644	0.1028			
$QTurn_{i,q}$	18,896	0.0192	0.0148	0.0058	0.0176	0.0354			
$Size_{i,q}$	33,712	1.9187	0.9294	1.2266	1.7564	2.4766			
$SOE_{i,q}$	26,208	0.4175	0.4997	0	0	1			
$UE_{i,q}$	18896	-0.0052	0.0701	-0.0125	-0.0005	0.0072			
UEVisit <sub>i,q</sub>	24,184	0.4836	1.0534	-0.3333	0.1447	0.5429			
$VEPS_{i,q}$	33,712	0.0964	0.1863	0.0289	0.0556	0.1091			
Analyst/Brokerage Firm Characteristics									
$BSize_{k,q}$	3,136	3.5142	0.7849	3.2189	3.7378	4.0073			
BCover <sub>k,q</sub>	3,136	5.1913	0.8556	4.8809	5.4293	5.7907			
DIPost <sub>i,k,q</sub>	130,309	0.6131	0.4870	0	1	1			
$DIV$ isi $t_{i,k,q}$	130,309	0.3206	0.4667	0	0	1			
$FirmExp_{i,k,q}$	130,309	1.8130	0.1683	1.7112	1.8550	1.9467			
Horizon <sub>i,k,q</sub>	130,309	5.1467	0.9074	4.4205	5.0776	5.5191			
$InExp_{k,q}$	3,136	2.3840	0.8888	2.1001	2.6501	3.0491			
Local <sub>i,k,q</sub>	130,309	0.0719	0.2583	0	0	0			
Analyst forecast proxie	S								
$Acc^{1}_{i,q}$	33,712	-0.0429	0.0543	-0.0558	-0.0233	-0.0080			
$Acc_{i,q}^2$	33,712	-1.3267	2.1941	-1.9979	-0.6710	-0.1864			
Disp <sub>i,q</sub>	33,712	0.2419	0.2517	0.0902	0.1718	0.3078			
$I\!Acc^1_{_{i,k,q}}$	130,309	0.0252	0.0307	0.0054	0.0148	0.0325			
$IAcc_{_{i,k,q}}^2$	130,309	0.9443	1.8843	0.1406	0.4130	0.9746			
$RAcc_{i,k,q}$	130,309	0.0000	0.7395	-0.5773	-0.0973	0.4171			
City-level variables									
NFirms <sub>i,q</sub>	4,896	4.4430	4.4543	3.0001	3.8067	4.4773			
$GDPGrowth_{i,q}$	4,896	0.1143	0.0524	0.0738	0.0991	0.1557			