Do Corporate Site Visits Constrain Real Earnings Management?

ABSTRACT

This study investigates the relationship between corporate site visits (CSVs) and firms' real earnings management. Using a unique dataset of site visits to Chinese firms listed on the Shenzhen Stock Exchange from 2009 to 2016, we find that such visits are negatively associated with firms' real earnings management. The results are robust to using alternative corporate site visit measures, controlling for alternative communication channels, and using the propensity score matching method. In cross-sectional analyses, we find that the negative association between site visits and real earnings management is stronger for more complex firms and firms with greater information asymmetry. In addition, we find that CSVs are negatively associated with both management and corporate misconduct but not with accrual-based earnings management or restatements.

Keywords: Corporate site visits; Real earnings management; Monitoring; Information acquisition; Misconduct

JEL Classifications: G10 G20 M41

I. Introduction

Corporate site visits (CSVs) are an important way for market participants, such as investors, analysts, and the media, to acquire valuable information about firms (Brown, Call, Clement, & Sharp 2015). CSVs are especially important in China, because many Chinese listed firms operate in an opaque information environment (Morck, Yeung, & Yu 2000; Chen, Huang & Lin 2016). Unlike traditional communication channels such as conference calls, during which top executives mainly address earnings and other financial metrics and then answer questions from investors and analysts, site visits allow in-depth communication with a wide range of employees and direct observation of firms' operating activities and facilities. Such activities help visitors understand companies' long-term growth potential because they provide "soft" information on matters such as corporate strategies, key challenges, corporate culture, and employee morale (Chen et al. 2021). Although the frequency of CSVs has increased dramatically in recent years (Cheng, Du, Wang, & Wang 2016), research evaluating their effectiveness and consequences is limited.

Using CSV data from China, the literature documents some of the benefits and costs of CSVs. The benefits of CSVs include improving analyst forecast accuracy (Cheng et al. 2016), promoting corporate innovation (Jiang & Yuan 2018), reducing fraud (Broadstock & Chen 2021), and disciplining managers and curbing corporate overinvestment (Cao, Gong, & Shi 2017). The costs include strengthening managers' incentives to withhold bad news, which increases future crash risk (Gao, Cao, & Liu 2017). Our study aims to extend this line of the literature by examining the relationship

between CSVs and corporate real earnings management.

While there are many different definitions of what constitutes real earnings management (e.g. Roychowdury 2006), these definitions have been strongly criticized in Ball (2013). From the perspective of our paper, we define real earnings management as operations that would be against the interests of committed shareholders who are willing to invest time and energy into CSVs as opposed to transient shareholders who trade mainly for short-term profits. We view CSVs as a vehicle for directly constraining operating decisions that may be against the interests of long-term profitability, and only indirectly as a constraint on reported financial values.

We propose that CSVs should help align managers' interest with that of long-term stakeholders, and thus be negatively associated with real earnings management. First, compared to transient investors, long-term dedicated shareholders are more likely to conduct CSVs due to the significant travel costs. These dedicated investors can thus take the visiting opportunity to monitor and constrain managerial decisions that may jeopardize the firm's long-term profitability. Second, CSVs may reduce managers' short-term pressure by helping visitors better understand companies' long-term growth. Due to information asymmetry, corporate stakeholders often have to rely on short-term earnings to infer managers' ability and firms' long-term performance (Aghion et al., 2013). Chen et al. (2021) suggest that CSVs are especially useful to help visitors understand companies' long-term growth potential, as they allow for more in-depth

communication and more personal assessment of subjective information, such as corporate strategy.

Taken together, we argue that CSVs may result in more corporate policies that are aligned with long-term investors' interest, and fewer policies that are motivated merely to boost current earnings. That is, CSVs should be negatively related to real earnings management. We caution that we do not infer causality between CSVs and real earnings management. On the one side, firms that are dedicated to long-term value creation may attract more visitors. On the other side, more CSVs may result in more stringent monitoring by dedicated investors and less short-term pressure, and thus lower likelihood for real earnings management.

To explore the relationship between CSVs and real earnings management, we take advantage of a dataset of site visits to Chinese listed firms. China's Shenzhen Stock Exchange (SZSE) has required listed firms to make timely disclosures about each site visit in their annual reports since 2009 and via an online platform, called *Hudongyi*, since 2012. These mandatory disclosure requirements provide a unique opportunity to study CSVs.

Using a final sample of 7,922 firm-year observations of site visits from 2009 to 2016, we find that an increase in CSVs is significantly associated with a decrease in real earnings management. These results are robust to using alternative measures of CSVs,¹ controlling for alternative communication channels, and using a matched

¹ The database keeps track of site visits that actually occurred. In the main analysis, we include observations with zero site visits. In a robustness check, we also examine firms with at least one site visit every year. Our results are still robust.

sample. We further show that the negative association between CSVs and real earnings management is stronger for more complex and more opaque firms.

Because of data constraints, most CSV studies focus on one or two types of visitors (Cheng et al. 2016; Dong et al. 2021). As our sample is more comprehensive, covering all visitor types, in an additional analysis, we further assess which visitor types drive our baseline result. We find a negative relationship between CSVs and real earnings management for multiple visitor types, including analysts, institutional investors, foreign investors, asset managers, and banks (but not individual investors, government agencies, finance companies, or the media). Finally, we find that CSVs are negatively associated with misconduct by firms and managers but not with accrual-based earnings management or restatements.

This paper contributes to the literature in three ways. First, we add to the emerging literature that examines the effect of CSVs on the firms visited. The early literature on CSVs examines how these visits improve visitors' information set and the resulting capital market consequences (e.g., Cheng et al. 2016; 2019; Gao et al. 2017;). More recently, scholars start to pay attention to the role of CVSs in corporate governance, such as in promoting innovation (Jiang & Yuan 2018), moderating dividend policy (Cao et al. 2020), mitigating fraudulence (Su et al. 2021), and reducing accrual-based earnings management (Qi et al. 2021). We extend this literature by showing that CSVs play an important role in constraining operational decisions that benefit short-term investors but hurt the interest of committed shareholders, i.e., real earnings management.

Second, the literature shows that long-term and short-term institutional investors

may exert different influences on corporate policies and values (e.g., Bushee 1998; 2001; Borochin & Yang 2017). However, evidence of the mechanisms underlying this influence is rather limited. This paper provides a possible underlying mechanism. That is, dedicated shareholders use CSVs as a tool, which is costly but efficient, to discipline managers and protect firms' long-term value.

Third, our findings have important policy implications. We show that CSVs may constrain managers' myopic behaviors, indicating the need for stronger regulations on the arrangement and the disclosure of CSVs. Such regulations may be especially important for countries with opaque information environment and weak investor protection, as we document CSVs' dual roles in information acquisition and in disciplining managers.

The remainder of this paper is structured as follows. The next section presents the institutional background and hypothesis development. Section 3 describes the research design, including the construction of the variables and a descriptive analysis. Section 4 presents the empirical results, and Section 5 discusses the cross-sectional tests and additional analyses. Section 6 concludes the paper.

II. Institutional Background and Hypothesis Development

Institutional background of CSVs in China

Although CSVs are increasingly viewed as an important way for stakeholders to acquire information about a firm, how such visits affect managers' decisions remains unclear. This lack of clarity is due in part to a lack of data, as most countries, unlike China, do not require firms to publicly disclose information about such visits. The SZSE established rules that specifically require the disclosure of information about CSVs. Over the course of a decade, these rules evolved through three stages. The first stage started in 2006, when the SZSE began requiring CSV information to be disclosed to regulators. In August of that year, the SZSE issued the "Fair Information Disclosure Guideline," which requires listed companies to record the details of every visit, including the time and location, the methods and content of communications, visitors' names and affiliations, and all other visit-related information. Firms listed on the SZSE must report an upcoming visit to the CSRC two business days in advance and provide a summary of the visit to both the CSRC and the SZSE afterward.

The second stage began in 2009, when these reports were made available to the public. The SZSE implemented a new rule requiring all listed firms to publicly disclose site visit summary information in their annual reports. This rule has been strictly enforced, and the SZSE publicly announces which firms fail to do so.

The third stage started in 2012, when the SZSE began requiring all listed firms to disclose detailed information on every CSV via the *Hudongyi* platform within two business days.² The objective of this amendment is to ensure the timely dissemination of site visit information. Anyone interested in visiting can contact the firm via its website or the contact information in its annual report. In general, firms have a specific group of managers responsible for investor relations. Visitors must cover their own travel costs and apply for permission to conduct a site visit in advance. Article 41 of the SZSE's "Guidelines for Investor Relations Management" states that "listed companies

² *Hudongyi* is operated by SZSE and enables communication between investors and listed firms. The website can be found at http://irm.cninfo.com.cn/szse/index_en.html.

should try to accommodate, to the greatest extent, requests from investors, analysts, and fund managers to visit company headquarters and project sites." Article 41 further emphasizes that "listed companies should arrange the site visits properly so that visitors may better understand the companies' business and operational situations." According to the interviews conducted by Cheng et al. (2016), listed firms do not usually decline site visit requests, but the timing of a visit is subject to the firm's availability. Firms communicate with site visitors to create a detailed agenda. In addition, investor relations managers can invite specific groups to visit. During a site visit, visitors not only observe firm operations but also discuss their concerns, ask questions, solicit indepth answers, and interact with managers and a wide range of employees (Cheng et al. 2016; Cheng et al. 2019; Chen et al. 2021).

Hypothesis development

Managers often face a trade-off between increasing short-term earnings and maximizing long-term value (Graham et al. 2005). Real earnings management occurs when managers make operational decisions that boost current earnings but hurt the interest of long-term shareholders. The literature shows that managers have at least two incentives to do this. The first is managerial opportunism; that is, managers engage in real earnings management to meet an earnings target for personal benefit, such as enhancing job security or obtaining a bonus (Matsunaga & Park 2001; Graham et al. 2005). The second incentive is to signal future performance (Gunny 2010; Graham et al. 2005). Investors and equity analysts often rely heavily on current earnings to infer managers' ability and to develop their expectations for future earnings. Therefore, managers may engage in real earnings management to meet earnings benchmarks, so they can build credibility with investors, analysts, and other stakeholders and convey their firms' future growth prospects to the market (Bartov, Givoly, & Hayn 2002; Graham et al. 2005).

We propose that CSVs should be negatively associated with real earnings management for two reasons. First, dedicated shareholders are more likely than transient investors to conduct CSVs, because tours to corporate headquarters and operating facilities are likely to impose significant travel costs to visitors. These longterm investors can take the visiting opportunity to monitor and discipline managerial decisions that may jeopardize their interest. Cao et al. (2020) suggest that site visitors can influence corporate policies by serving as a form of soft activism and by hard governance such as exit and vote. Through the former, visiting shareholders can raise questions, solicit answers, and may form proposals in subsequent shareholder meetings that are in their best interest. Through the latter, dedicated visitors can discipline managers to behave in their best interest by the threat of exit or vote. Therefore, CSVs are likely to result in more corporate policies that are aligned with the interest of longterm stakeholders.

Second, CSVs may reduce managers' short-term pressure by helping visitors better understand companies' long-term growth. Chen et al. (2021) suggest CSVs are especially useful to help visitors understand companies' long-term growth potential. Unlike the traditional communication channels such as conference calls, non-deal roadshows, or investors' days, CSVs allow visitors to observe firms' operating activities and facilities and communicate with general managers, functional managers, and frontline managers. During face-to-face meetings, visitors can obtain more soft information, such as competitive advantage, corporate strategies, corporate culture, employee morale, etc. (Cheng et al., 2016, 2018). Such information is highly dependent on personal assessment and difficult to summarize in numbers or words, but provides essential insights into a firm's long-term performance prospects. Jiang and Yuan (2018) and Dong, Yue, and Cao (2020) confirm the usefulness of CSVs in delivering long-term value-related information. Specifically, Jiang and Yuan (2018) find that CSVs foster innovation, which is a form of long-term investment. Dong et al. (2020) provide more direct evidence, showing that CSV reports have predictive power for long-term stock returns. By providing in-depth value-related information and building creditability with visitors, CSVs could alleviate managers' pressure to boost short-term earnings at the expense of long-term value.

Taken together, we argue that CSVs may help discipline managers and align managers' interest with that of long-term stakeholders, and thus result in more corporate policies that are aligned with long-term investors' interest, and fewer policies that are motivated merely to boost current earnings. That is, CSVs should be negatively related to real earnings management. We propose hypothesis H1 as follows:

H1: Ceteris paribus, the frequency of corporate site visits is negatively associated with real earnings management.

III. Research Design, Data Sample, and Descriptive Statistics Measurement of real earnings management

In this section, we describe the models used to measure real earnings management.

We adapt the modified real earnings management models from Roychowdhury (2006) according to the refinements suggested in Gunny (2010) and Vorst (2016), which include an indicator variable for the decline in sales to account for asymmetric cost stickiness (Anderson, Banker, & Janakiraman 2003; Dierynck, Landsman, & Renders 2012). Specifically, we obtain abnormal cash flow (RM_CFO), abnormal operations costs (RM_DIS), and abnormal production costs (RM_PROD) from three models as follows:

$$\frac{CFO_t}{A_{t-1}} = a_0 + a_1 \frac{1}{A_{t-1}} + a_2 \frac{S_t}{A_{t-1}} + a_3 \frac{\Delta S_t}{A_{t-1}} + a_4 \frac{\Delta S_t}{A_{t-1}} * \text{DD} + \varepsilon_t.$$
(1)

In Equation (1), *CFO* represents the operating cash flow in year t, A_t represents the total assets in year t, S represents the firm's sales in year t, and ΔS_t is the difference in sales between years t and t-1. *DD* is an indicator variable that equals 1 when sales decline in year t and 0 otherwise.

$$\frac{DIS_t}{A_{t-1}} = a_0 + a_1 \frac{1}{A_{t-1}} + a_2 \frac{S_{t-1}}{A_{t-1}} + a_3 \frac{\Delta S_{t-1}}{A_{t-1}} + a_4 \frac{\Delta S_{t-1}}{A_{t-1}} * DD + \varepsilon_t$$
(2)

 DIS_t is the discretionary expenses (including the cost of goods sold) in year t.

The other notations are the same as those in Equation (1).

$$\frac{PROD_t}{A_{t-1}} = a_0 + a_1 \frac{1}{A_{t-1}} + a_2 \frac{S_t}{A_{t-1}} + a_3 \frac{\Delta S_t}{A_{t-1}} + a_4 \frac{\Delta S_{t-1}}{A_{t-1}} + a_5 \frac{\Delta S_t}{A_{t-1}} * \text{DD} + a_6 \frac{\Delta S_{t-1}}{A_{t-1}} * \text{DD} + \varepsilon_t$$
(3)

 $PROD_t$ is the total production cost in year *t*, which equals $COGS_t + \Delta INV_t$; COGS is the cost of goods sold, and ΔINV_t is the change in inventory. As such, RM_CFO , RM_DISX , and RM_PROD are the residuals from regression Equations (1), (2), and (3), respectively.

We regress these models by industry-year and require the number of observations

in each to be greater than 10. Following Cohen and Zarowin (2010), we use two aggregate measures of real earnings management, *RM1* and *RM2*, to capture a firm's total real earnings management in a particular fiscal year.³ *RM1* and *RM2* are defined as follows:

$$RM1 = RM_DISX + RM_PROD \tag{4}$$

$$RM2 = RM_CFO + RM_DISX.$$
 (5)

To test hypothesis H1, we estimate the following regression equation:

Real Earnings Management (RM) = $\beta_0 + \beta_1 Ln (CSVs) + \beta_2 Controls + \varepsilon$. (6)

The dependent variable, RM, comprises the two measures of RM1 and RM2 described above. We measure the independent variable of interest, Ln(CSVs), using the natural logarithm of one plus the number of CSVs in a firm-year. Following the literature (e.g., Dechow, Ge, & Schrand 2010; Fang, Huang, & Karpoff 2016), we include the following set of control variables: Ln (MKV), measured by the natural logarithm of a firm's market capitalization; MTB, measured by a firm's market-to-book ratio; *Firm Age*, measured by the time between the year a firm was first listed and the current year; Big4, which indicates whether a firm is audited by a Big 4 accounting firm; *Analyst*, which indicates whether a firm is followed by at least one analyst; and *Institution*, the proxy for a company's corporate governance as measured by its percentage of institutional ownership. NI refers to a company's profitability, as measured by net income, and NOA refers to its net operating assets. We also include a

³ As suggested by Roychowdhury (2006) and Cohen and Zarowin (2010), "some activities that lead to abnormally high production costs might also lead to abnormally low CFO." Therefore, we do not use an aggregate measure based on all three real earnings management proxies because combining the two measures can result in double counting. In addition, the three individual measures capture different types of real earnings management.

dummy indicator for "suspect" firms with a return on assets (*ROA*) close to 0 (i.e., within the range of 0 to 0.005 as suggested by Roychowdhury (2006)) because such firms have a stronger incentive to engage in real earnings management. We include accrual-based earnings management (*AM*) to control for the cost–benefit trade-off between accrual-based and real earnings management. Finally, we control for *SOE*, a variable that indicates whether a firm is state-owned. We also control for year and industry fixed effects. All of the variables are defined in detail in Appendix B. β_1 is our coefficient of interest.

Sample

We collect CSV records from the Chinese Research Data Services (CNRDS) platform. Our initial sample includes 200,006 site visit records for 1,424 distinct SZSE-listed firms from 2009 to 2016.⁴ We set CSV frequency to zero for firms with no site visits in the database.⁵ We obtain data for the other financial control variables from the CSMAR database. We follow the convention of excluding firms in the finance industry, firms with B-shares, and firms with missing values for the variables used in the multivariate analyses. We also exclude firms listed on the Shanghai Stock Exchange and those listed on China's Growth Enterprise Market. Our final sample consists of 7,922 firm-year observations.⁶

[Insert Table 1 here]

Table 1 shows the distribution of the CSVs by year, month, and visitor type. Panel

⁴ Currently, 2016 is the most recent year for which the data are available from CNRDS. Nevertheless, our sample coverage is much greater than that of prior CSV studies. For example, if we restrict the sample period to 2009–2013, the sample period in Cheng et al. (2016), we obtain 113,141 site visits to 1,580 distinct firms, which is considerably more than the 21,189 site visits to 1,040 firms reported by Cheng et al. (2016).

⁵ In the next section, we perform a robustness check by focusing on firms with at least one site visit every year.
⁶ All of the continuous variables are winsorized at the top and bottom 1% across years to control for potential outliers.

A shows the annual number of CSVs from 2009 to 2016. It shows an overall increase in the number of CSVs, with a peak in 2014. From 2012 to 2013, the number of CSVs increased considerably. In July 2012, to reduce the information acquisition costs of small and medium-sized investors, the SZSE began requiring all listed firms to disclose CSVs within two business days on the *Hudongyi* platform. We believe that the increase in CSVs in 2013 may be at least partially due to this regulation change. When investors are aware of other investors' CSVs, they may be motivated to visit themselves. This regulatory change also increases the market prominence of the visited firms. Another potential explanation for the significant increase in CSVs is that China's stock markets had the world's worst performance in 2013; therefore, many investors may have decided to visit the firms they were invested in to obtain more information about them.

Panel B shows that CSVs occurred most frequently in November, followed by May and August, in the sample period. As Chinese firms' fiscal years end in December, this pattern seems to indicate that outsiders tend to visit firms more often at quarter- or yearend. Panel C reports the distribution of site visits by visitor type. It shows that 35.55% of the site visits were made by securities agencies, mostly analysts, followed by mutual funds (26.33%) and private funds (9.97%).

Descriptive statistics

[Insert Table 2 here]

Table 2 presents the descriptive statistics for our sample. For the dependent variables, the means of *RM1* and *RM2* are -0.003 and -0.002, respectively, consistent with those reported in Cheng et al. (2016). The means and medians of the three *RM* proxies, *RM_CFO*, *RM_PROD*, and *RM_DISX*, are all close to zero. For the main

independent variable, *Ln* (*CSVs*), the mean and median are 2.003 and 2.079, respectively. The raw measure of *CSVs* suggests that about 25 site visits occur on average during a firm-year (with a standard deviation of 47.140). This is much higher than the average of 10 site visits reported by Cao, Gong, and Shi (2017), because they only consider visits by analysts; our sample includes all visitor types (as shown in Table 1). In terms of firm characteristics, 32.9% of the firms in our sample are state-owned enterprises and 3% are audited by Big 4 auditors. Additionally, the firms in our sample have a median market value of 4.877 billion RMB (= e^15.400, around 0.75 billion USD) and an average market-to-book of 0.641. They are, on average, eight years old and have 5.715% institutional ownership.

IV. Empirical Results Baseline regression

In this section, we report the results of testing hypothesis H1. To alleviate concerns about potential cross-sectional and time-series omitted variables, we include industry and year fixed effects and use robust standard errors corrected for firm clustering.

[Insert Table 3 here]

Table 3 presents the results. The first three columns report the results of regressing the three individual components of RM on Ln (CSVs), and the last two columns report the results using the aggregate measures, RM1 and RM2, as the dependent variables. The coefficients on Ln (CSVs) are negative and significant in all of the columns except column (1), indicating that CSVs are negatively associated with real earnings management.

Specifically, for the combined measures in columns (4) and (5), we find that the

coefficients on *Ln* (*CSVs*) are both negative and significant at the 1% level for the regressions using *RM1* (-0.005, t = -3.13) and *RM2* (-0.003, t = -3.84) as the dependent variables. This effect is also economically significant. More specifically, the coefficients on *Ln* (*CSVs*) for *RM1* and *RM2* indicate that ceteris paribus, an increase of one standard deviation in the number of site visits is associated with a decrease of 4.807% (= -0.005 × 1.721/0.179) in the standard deviation of *RM1* and a decrease of 4.375% (= -0.003 × 1.721/0.118) in the standard deviation of *RM2*. Compared with the effect of firm size, one standard deviation in *Ln* (*MKV*) is associated with a decrease of about 6.4% of one standard deviation in *RM1* (about 6.9% for *RM2*). These results show that the effect of CSVs is smaller than, but comparable to, the effect of firm size.

For the control variables, we find that the coefficients on *Ln (MKV)*, *MTB*, and *NI* are significantly negative across all of the regressions, indicating that larger firms, firms with more growth opportunities, and more profitable firms engage in less earnings management. We also find that firms with a higher level of accrual-based earnings management exhibit a larger increase in real earnings management. Finally, firms with more institutional ownership, suspect firms, and firms with a Big 4 auditor are not significantly associated with real earnings management (*RM1* and *RM2*).⁷

Robustness checks

We conduct three robustness checks for the baseline regression and report the results in Table 4. Panel A presents the results of regressing *RM1* and *RM2* on alternative CSV measures and of repeating the baseline regressions with an alternative

⁷ If we add firm fixed effects in the baseline regression model, the coefficients on CSVs are insignificant. This insignificant result is consistent with an unobservable firm effect driving the results.

subsample. In columns (1) and (2), we replace the number of CSVs (i.e., the number of events) with the number of corporate site visitors (i.e., the number of visitors attending an event) as the main explanatory variable. If the number of visitors is missing from the raw data, we assign a value of one. In columns (3) and (4), we replace the independent variable with a dummy variable, *CSV Dummy*, that indicates whether a firm has at least one visitor in a given year. In columns (5) and (6), we do not change the variables, but we restrict the sample to firms with at least one corporate site visit in a given year. Overall, the results in Panel A show that our main results are robust to these alternative measures and subsample; the coefficient estimates in all of the columns are negative and significant, indicating that CSVs are negatively associated with real earnings management.

[Insert Table 4 here]

Although CSVs uniquely allow investors to directly communicate and interact with company management and employees, we acknowledge that investors and other stakeholders can interact with a company through other channels. For example, most companies' websites have an investor relations section and/or an investor consulting section. Many companies also have official Weibo and WeChat accounts (two of the most popular social media platforms in China), through which investors can obtain information about firms' new developments and interact with firms' managers. To account for these factors, we add three dummy variables, *Web Relation, Web Consultant*, and *Weibo & WeChat*, to the regression. *Web Relation* is a dummy variable that indicates whether the company's website has an investor relations section. *Web Consultant* is a

dummy variable indicating whether the company's website has an investor consulting section. *Weibo & WeChat* is a dummy variable that indicates whether the firm has an official WeChat or Weibo account.

The results are presented in Panel B of Table 4. We find that after controlling for the three alternative communication channels, the coefficient estimates on *Ln (CSVs)* are negative and significant, suggesting that the negative association between CSVs and real earnings management is unlikely to be driven by these communication channels. However, of the three alternative communication channels, only the coefficient on *Weibo & WeChat* is negative and significant. Compared with investor relations and investor consulting sections on firm websites, *Weibo* and *WeChat* are more effective and offer more interactive communication between a firm and outsiders.

Panel C of Table 4 presents the regression results after propensity score matching using all of the other control variables and the industry and year information in the baseline regression. For the matching process, we match the firms with and without site visits using 1:1 nearest neighbor matching on the propensity score. The caliper is 0.0001. Using the matched sample, we find that CSVs are still negatively related to *RM1* (coefficient = -0.004, t = -1.81) and *RM2* (coefficient = -0.002, t = -2.07).

Overall, the results in Tables 3 and 4 are consistent with hypothesis H1. We caution that our findings should be interpreted as a negative association between CSVs and real earnings management rather than as a causal effect.

V. Cross-Sectional Tests, Additional Analyses, and Endogeneity Concerns

Effect of complexity

Complex firms are usually less transparent and are subject to greater managerial discretion (Bushman et al. 2004). To the extent that these firms are in great need of external information exchange, we expect the negative association between CSVs and real earnings management to be stronger for more complex firms. Following prior studies, we use two proxies, *Manufacturing Firms* and *R&D Intensity*, to capture firm complexity (e.g., Graham et al. 2005). These two variables fit the features of this study because it is difficult for an outsider to correctly value either type of firm's tangible and intangible assets solely from its financial statements.

In Panel A of Table 5, we split the sample according to whether a firm is in the manufacturing industry. In columns (1) and (2), we include only nonmanufacturing firms, i.e., low complexity firms. The coefficients on Ln (*CSVs*) are both insignificant and close to zero, showing no association between CSVs and real earnings management in low complexity firms. In columns (3) and (4), we include only manufacturing firms, i.e., high complexity firms. The coefficients on Ln (*CSVs*) are both negative and statistically significant, meaning that the negative association between CSV and real earnings management is stronger in more complex firms.

In Panel B, we split the sample into high and low R&D intensity groups based on the median R&D intensity value. In columns (1) and (2), we include only low R&D intensity firms, i.e., low complexity firms. Again, the coefficients on *Ln (CSVs)* are both insignificant and close to zero, showing no association between CSVs and real earnings management in low complexity firms. In columns (3) and (4), we include only high R&D intensity firms, i.e., high complexity firms. The coefficients on *Ln (CSVs)* are significantly negative in both columns, meaning the negative association between CSV and real earnings management is stronger for such firms.

[Insert Table 5 here]

Effect of the information environment

As discussed, CSVs can be an effective way for investors to acquire information and thereby alleviate information asymmetry regarding firms' long-term growth prospects. We expect the negative association between CSVs and real earnings management to be stronger for firms with greater information asymmetry.

To test this conjecture, we use two proxies to measure information asymmetry: firm size and whether a firm has a top board secretary. Prior studies suggest that large firms usually have low information asymmetry (see, for example, Corwin 2003; Tajuddin et al. 2015). The top board secretaries in China are ranked each year by the New Fortune magazine. This ranking started in 2005 and has broad influence in China. The board secretary is responsible for a company's information disclosure and investor relationship management and participates in other corporate decisions (Nowland, Chapple, & Johnston 2020; Wang, Ye, & Goyal 2019). Luo et al. (2015) find that firms with a top board secretary have greater information transparency. Following their study, we use this measure as a proxy for the level of information asymmetry. We report the results in Table 6.

In Panel A, we split the sample into large and small firms according to firms' median book value of total assets. In columns (1) and (2), we include only large firms, i.e., low information asymmetry firms. For these firms, the coefficients on Ln (CSVs) are both insignificant and close to zero, indicating no association between CSVs and

real earnings management for transparent firms. In columns (3) and (4), we include only small firms, i.e., high information asymmetry firms. The coefficients on Ln (CSVs) are significantly negative and larger in magnitude, meaning that the negative association between CSV and real earnings management is stronger for smaller firms.

In Panel B, we split the sample according to whether the firm has a top board secretary. In columns (1) and (2), we include only firms with a secretary identified in the ranking, i.e., low information asymmetry firms. Again, the coefficients on Ln (*CSVs*) are not different from zero, indicating no significant association between CSVs and real earnings management for low information asymmetry firms. In columns (3) and (4), we include only firms without a top board secretary, i.e., high information asymmetry firms. The coefficients on Ln (*CSVs*) are negative and statistically significant in both columns, indicating a strong, negative association between CSVs and real earnings management for opaque firms.

[Insert Table 6 here]

Which types of site visitors make a difference?

Studies using Chinese firms' CSV data primarily focus on analysts and institutional investors (see, e.g., Cheng et al. 2016; Chang et al. 2017; Cheng et al. 2019; Chen et al. 2021). Because our sample includes different types of visitors, we further assess which visitor types drive our baseline result. To this end, we run the baseline regressions separately for each type and report the results in Table 7. Interestingly, we find that most of the explanatory power of CSVs is attributable to visitors from foreign institutions, mutual funds, insurance companies, asset management companies, and banks, as shown

by the significant and negative coefficients for the regressions of both *RM1* and *RM2*. This suggests that CSVs by these types of visitors are all influential in alleviating management myopia and thus are negatively associated with real earnings management. In contrast, we find that visitors from the media have the opposite effect: their visits increase real earnings management. One possible reason is that media coverage may bring more short-term attention and thus creates adverse incentives for managerial short-termism. Overall, the results in Table 7 indicate that CSVs by different types of visitors are associated with real earnings management to varying degrees. This is reasonable, because different types of visitors have different business relationships with the focal firm, and their objectives and influences on managers may differ. As such, their site visits may have different implications on earnings quality.

[Insert Table 7 here]

Misconduct and accrual earnings management

In this section, we further investigate whether there are similar associations between CSVs and other forms of managerial misconduct. In Table 8, we empirically test four types of managerial misconduct. Column (1) reports the results for accrualbased earnings management (AM). AM is estimated following Kothari et al's (2005) modified Jones model. We find no significant relation between CSVs and accrual-based earnings management. Column (2) reports the results for restatements. We define $D_Restate$ as an indicator variable that equals 1 if the firm has at least one accounting restatement in a given year and 0 otherwise (Dechow, Ge, Larson, & Sloan 2011). We run a logit regression and find no significant relation between CSVs and the likelihood of a restatement. In columns (3) and (4), respectively, we study managerial misconduct and corporate misconduct. We find that CSVs have a disciplining effect when we replace the dependent variable with two measures of misconduct. We define *Managerial Misconduct* as an indicator variable that equals 1 if a firm's managers have at least one fraud event in a given year and 0 otherwise. We define *Corporate Misconduct* as an indicator variable that equals 1 if the firm has at least one fraud event in a given year and 0 otherwise. We define *Corporate Misconduct* as an indicator variable that equals 1 if the firm has at least one fraud event in a given year and 0 otherwise. Most studies do not differentiate between manager and firm misconduct, as the two types largely overlap and are strongly correlated.⁸ The coefficients on *Ln (CSVs)* in the two regressions are both negative and significant, suggesting that CSVs discourage misconduct by both firms and managers.

[Insert Table 8 here]

VI. Conclusion

In this study, we examine the relationship between CSVs and real earnings management. We argue that to the extent that dedicated shareholders are more likely to travel to specific firms to monitor, CSVs should help discipline managers to act in the best interest of long-term shareholders. Moreover, because CSVs may serve as a special and useful tool for stakeholders to acquire in-depth information about firms' long-term growth prospects (Cheng et al. 2019; Chen et al. 2021), such visits should reduce managers' pressure to boost short-term earnings. Taken together, we expect CSVs to be associated with corporate policies that are more aligned with long-term investors' interest, and less aligned with that of transient investors. That is, CSV should be negatively related to real earnings management.

⁸ CSMAR classifies financial reporting misconduct by the type of violation. The two main violations involve a major failure to disclose information and a delay in disclosure.

Using a unique database of site visits to Chinese listed firms from 2009 to 2016, we provide evidence that site visit frequency is significantly negatively associated with real earnings management. The negative association is robust to using alternative measures of CSVs, controlling for alternative communication channels, and using a matched sample. In addition, we find the result to be stronger for more complex and more opaque firms.

We caution that the negative relationship between CSVs and real earnings management we document in this study should be interpreted as an association rather than a causal effect. Nonetheless, our findings have important and valuable implications, as investors can incorporate management's willingness to allow site visits into their beliefs about a firm's growth prospect and earnings quality.

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Appendix A: Examples of Corporate Site Visits

Example 1 (Cost control):

During visits to Noblelift Intelligent Equipment Co., Ltd (Code: 603611) in 2017, visitors expressed the concern that the increasing cost of raw materials might hurt the company's gross profit. Management responded that they would implement several strategies to control costs and improve profits. Specifically, they would: 1) use new technology to improve the process engineering and thus reduce cost; 2) improve raw material utilization; 3) hold managers accountable for cost controls by making them sign a responsibility report.

Example 2 (Discretionary Expenditures):

During a site visit in 2018, visitors asked the management of Shanghai Kehua Bio-Engineering Co. Ltd (Code: 002022) to justify the inconsistency between revenue growth and profit growth. Investors asked whether the difference was caused by the decreasing gross profit rate or by the increasing management fees or selling cost. Management said that they would cut down on expenditures to increase profits.

Example 3 (Different Product Lines):

During site visits to BlueSail Medical (Code: 002382, one of the largest manufacturers of disposable PVC gloves) in 2018, visitors inquired about production capacity and the future prospects of two product lines of disposable gloves for medical use: PVC gloves and nitrile gloves. Specifically, visitors asked the company management to justify the declining sales of PVC gloves in 2017 and explain the differences between the two product lines in terms of product features, targeted markets and the gross margin. Management team addressed these issues accordingly: (1) The company reduced the production volume of PVC gloves in 2017, and in the meantime, focused on improving the process engineering. Both strategies led to a temporary decline in sales. (2) Going forward, the company intends to promote disposable nitrile gloves more because they are more resilient and durable, are of higher quality and generate a higher gross margin than PVC gloves. (3) The market has tightened scrutiny on environmental issues, and consequently the industry production standard for PVC gloves will be higher, possibly leading to a future increase in the selling price of PVC gloves.

		Appendix B: Variable Definitions
Variable		Definition
<u>Real earnings manage</u>	emen	<u>t</u>
RM1	=	An aggregate measure of real earnings management, defined as the sum of <i>RM_PROD</i> and <i>RM_DISX</i> .
RM2	=	An aggregate measure of real earnings management, defined as the sum of <i>RM_CFO</i> and <i>RM_DISX</i> .
Corporate site visits (CSV	<u>s)</u>
CSVs	=	The number of corporate site visits for a given firm in year t.
Ln (CSVs)	=	The natural logarithm of one plus the number of corporate site visits for a given firm in year t.
Ln (Visit People)	=	The natural logarithm of one plus the number of people who visit a given firm in year t.
CSV Dummy	=	An indicator variable that equals one if the company has at least one site visit in year t, and zero otherwise.
Control Variables		
Ln (MKV)	=	The natural logarithm of a firm's market capitalization in year t.
МТВ	=	Market value divided by book value, adjusted by the industry-year mean at the beginning of year t.
Big4	=	An indicator variable that equals one if the firm uses a Big Four auditor, and zero otherwise.
Institution	=	The percentage of institutional ownership at the end of year t.
Firm Age	=	The time between when the firm is first listed on stock exchange and year t.
Analyst	=	An indicator variable that takes a value of one if the firm is followed by at least one analyst in year t, and zero otherwise.
NI	=	Net income divided by total assets in year t.
Suspect	=	An indicator variable that takes a value of one if the ROA falls in the range of $(0, 0.005]$ in year t, and zero otherwise.
NOA	=	Net operating assets minus net operating liabilities.
AM	=	Kothari's (2005) modified Jones model.
SOE	=	An indicator variable that equals one if the firm is state owned, and zero otherwise.
Additional Variables		
Manufacture	=	An indicator variable that equals one if the firm belongs to the manufacturing industry, and zero otherwise.
	=	An indicator variable that equals one if R&D intensity, as calculated by R&D expenditure/total assets, is larger than the sample median, and zero
R&D Intensity	=	otherwise. An indicator variable that equals one if total assets are higher than the
Company Size		sample median, and zero otherwise. An indicator variable that equals one if the firm's board secretary is ranked
Top Board Secretary	Ξ	as a top company secretary by the <i>New Fortune</i> magazine in year t, and zero otherwise.

	Appendix	B:	Variable	Definition
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		An indicator variable that equals one if the company's website has an
Web Relation	=	investor relations section, and zero otherwise.
		An indicator variable that equals one if the company's website has an
Web Consultant	=	investor consulting section, and zero otherwise.
		An indicator variable that equals one if the company has an official
Weibo & WeChat	=	WeChat or Weibo account, and zero otherwise.
		An indicator variable that equals one if the firm has a restatement event in
D_Restate	=	a given year, and zero otherwise.
Managerial		An indicator variable that equals one if the manager violates regulations
Misconduct	=	in a given firm-year, and zero otherwise.
Corporate		An indicator variable that equals one if the firm violates regulations in a
Misconduct	=	given firm-year, and zero otherwise.

Panel A: CSVs distribution	n by year		
Year	Number of site visits	Percentage	
2009	7,103	3.550	
2010	9,578	4.790	
2011	11,035	5.520	
2012	9,710	4.850	
2013	34,301	17.15	
2014	47,466	23.73	
2015	44,053	22.03	
2016	36,760	18.38	

Table 1: CSVs Distribution

Panel B:	CSVs	distribution	by	month
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Month	Number of site visits	Percentage
1	12,895	6.460
2	9,461	4.740
3	17,728	8.880
4	15,445	7.730
5	22,633	11.33
6	14,605	7.310
7	13,634	6.830
8	20,806	10.42
9	17,783	8.900
10	12,845	6.430
11	26,809	13.42
12	15,075	7.550

Panel C: CSVs distribution by visitor type

Visitor Type	Number of site visits	Percentage (%)
Asset Management Company	6,645	3.320
Bank	943	0.470
Finance Company	292	0.150
Foreign Institution	5,037	2.520
Government Agency	277	0.140
Individual Investor	3,343	1.670
Insurance Company	4,720	2.360
Media	1,945	0.970
Mutual Funds	52,660	26.33
Private Funds	19,935	9.970
Securities Agency	71,111	35.55
Trust Company	660	0.330
Others	32,438	16.22

Panels A, B, and C of the table respectively show the distribution of corporate site visits by year, month, and visitor type from 2009 to 2016.

	r	Table 2: Sam	ple Descriptive	e Statistics		
Variables	Ν	Mean	Std. Dev.	P25	Median	P75
Earnings managem	ent variable	s				
RM1	7922	-0.003	0.179	-0.074	0.012	0.090
RM2	7922	-0.002	0.118	-0.058	0.005	0.062
RM_CFO	7922	-0.001	0.084	-0.045	-0.001	0.042
RM_PROD	7922	-0.003	0.131	-0.057	0.003	0.059
RM_DISX	7922	-0.001	0.068	-0.024	0.009	0.037
Other Variables						
Ln (CSVs)	7922	2.003	1.721	0.000	2.079	3.497
CSVs	7922	25.250	47.140	0.000	7.000	32.000
Ln (MKV)	7922	15.460	0.876	14.810	15.400	16.020
MTB	7922	0.641	0.799	0.133	0.659	1.182
Big4	7922	0.030	0.171	0.000	0.000	0.000
Institution	7922	5.715	7.366	0.880	3.565	7.890
Firm Age	7922	8.455	5.976	3.000	6.000	14.000
Analyst	7922	0.802	0.398	1.000	1.000	1.000
NI	7922	0.039	0.056	0.013	0.036	0.066
Suspect	7922	0.050	0.218	0.000	0.000	0.000
NOA	7922	1.371	1.206	0.660	1.055	1.672
AM	7922	-0.001	0.077	-0.045	-0.002	0.039
SOE	7922	0.329	0.470	0.000	0.000	1.000

This table reports the descriptive statistics for the variables used in the regression analyses. Please see Appendix B for variable definitions.

	(1)	(2)	(3)	(4)	(5)
Dep. Var. =	RM_CFO	RM_PROD	RM_DISX	RM1	RM2
Ln (CSVs)	-0.000	-0.002**	-0.003***	-0.005***	-0.003***
	(-0.94)	(-2.09)	(-4.01)	(-3.13)	(-3.84)
Ln (MKV)	-0.010***	-0.009**	-0.004*	-0.013**	-0.014***
	(-8.33)	(-2.44)	(-1.84)	(-2.37)	(-5.02)
MTB	-0.006***	-0.035***	-0.017***	-0.051***	-0.022***
	(-4.90)	(-11.49)	(-7.80)	(-11.03)	(-9.12)
Big4	-0.008**	-0.016	-0.006	-0.022	-0.014
	(-2.37)	(-1.40)	(-0.58)	(-1.06)	(-1.23)
Institution	0.000	-0.000	-0.000	-0.001	-0.000
	(1.49)	(-1.04)	(-1.03)	(-1.10)	(-0.44)
Firm Age	0.000**	-0.000	-0.000	-0.001	0.000
	(2.27)	(-0.96)	(-0.54)	(-0.87)	(0.30)
Analyst	0.005***	-0.006	-0.009***	-0.015**	-0.004
	(3.03)	(-1.49)	(-3.36)	(-2.43)	(-1.30)
NI	-0.443***	-0.693***	-0.077***	-0.770***	-0.521***
	(-22.65)	(-14.40)	(-2.63)	(-11.01)	(-14.36)
Suspect	-0.002	0.007	0.004	0.011	0.002
	(-1.01)	(1.48)	(1.30)	(1.57)	(0.56)
NOA	-0.007***	0.004***	0.004***	0.009***	-0.002*
	(-9.55)	(2.60)	(4.58)	(3.67)	(-1.94)
AM	0.919***	0.339***	0.055***	0.394***	0.974***
	(80.76)	(10.87)	(3.59)	(9.83)	(48.47)
SOE	-0.003*	0.000	0.001	0.002	-0.002
	(-1.79)	(0.07)	(0.27)	(0.17)	(-0.38)
		. /	. ,		
Ν	7922	7922	7922	7922	7922
Year & Ind F.E.	Yes	Yes	Yes	Yes	Yes
Adjusted-R ²	0.802	0.227	0.081	0.199	0.536

This table reports the results of the OLS regressions of the real earnings management measures on CSVs. The dependent variables in columns (1) to (3) are, respectively, *RM_CFO*, *RM_PROD*, and *RM_DISX*. The respective dependent variables in columns (4) and (5) are *RM1* and *RM2*. *RM1* is the aggregate measure of *RM_PROD* and *RM_DISX*, which is shown in Equation 4. *RM2* is the aggregate measure of *RM_CFO* and *RM_DISX*, as shown in Equation (5). The independent variable, *Ln (CSVs)*, is the natural logarithm of one plus the number of corporate site visits for a given firm in a given year. The t-values are based on robust standard errors and clustered by firm, then reported in parentheses. All variables are defined in Appendix B. Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Var. =	RM1	RM2	RM1	RM2	RM1	RM2
Ln (Visit People)	-0.005***	-0.003***				
	(-3.13)	(-3.84)				
CSV Dummy			-0.011**	-0.006**		
			(-2.18)	(-2.36)		
Ln (CSV)					-0.008***	-0.006***
					(-2.92)	(-3.76)
Ln (MKV)	-0.013**	-0.014***	-0.015***	-0.016***	-0.009	-0.012***
	(-2.37)	(-5.02)	(-2.81)	(-5.58)	(-1.41)	(-3.62)
MTB	-0.051***	-0.022***	-0.051***	-0.022***	-0.056***	-0.024***
	(-11.03)	(-9.12)	(-11.02)	(-9.09)	(-9.74)	(-8.04)
Big4	-0.022	-0.014	-0.023	-0.014	-0.026	-0.017
	(-1.06)	(-1.23)	(-1.12)	(-1.29)	(-1.12)	(-1.36)
Institution	-0.001	-0.000	-0.001	-0.000	-0.000	-0.000
	(-1.10)	(-0.44)	(-1.20)	(-0.58)	(-0.79)	(-0.14)
Firm Age	-0.001	0.000	-0.001	0.000	-0.002*	-0.000
	(-0.87)	(0.30)	(-0.74)	(0.48)	(-1.73)	(-0.55)
Analyst	-0.015**	-0.004	-0.017***	-0.006*	-0.007	-0.002
	(-2.43)	(-1.30)	(-2.86)	(-1.88)	(-0.86)	(-0.48)
NI	-0.770***	-0.521***	-0.774***	-0.524***	-0.879***	-0.572***
	(-11.01)	(-14.36)	(-11.05)	(-14.39)	(-9.59)	(-11.61)
Suspect	0.011	0.002	0.012*	0.003	0.005	-0.000
	(1.57)	(0.56)	(1.68)	(0.70)	(0.47)	(-0.05)
NOA	0.009***	-0.002*	0.009***	-0.002*	0.011***	-0.003*
	(3.67)	(-1.94)	(3.76)	(-1.81)	(3.86)	(-1.68)
AM	0.394***	0.974***	0.393***	0.974***	0.407***	1.002***
	(9.83)	(48.47)	(9.80)	(48.41)	(8.27)	(43.02)
SOE	0.002	-0.002	0.002	-0.002	0.004	-0.003
	(0.17)	(-0.38)	(0.21)	(-0.32)	(0.38)	(-0.57)
N	7922	7922	7922	7922	5311	5311
Year & Ind F.E.	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted-R ²	0.199	0.536	0.198	0.535	0.213	0.539

Table 4: Robustness Check

	(1)	(2)
Dep. Var. =	RM1	RM2
Ln (CSVs)	-0.005***	-0.003***
	(-2.84)	(-3.44)
Web Relation	-0.001	0.001
	(-0.05)	(0.15)
Web Consultant	0.004	0.000
	(0.43)	(0.07)
Veibo & WeChat	-0.031***	-0.020***
	(-4.11)	(-5.00)
n (MKV)	-0.013**	-0.014***
	(-2.31)	(-4.99)
ITB	-0.051***	-0.022***
	(-10.73)	(-8.91)
ig4	-0.023	-0.014
	(-1.09)	(-1.27)
astitution	-0.001	-0.000
	(-0.99)	(-0.35)
irm Age	-0.001	0.000
	(-0.94)	(0.18)
nalyst	-0.014**	-0.004
	(-2.33)	(-1.17)
ſ	-0.767***	-0.519***
	(-11.04)	(-14.49)
ispect	0.012	0.002
	(1.62)	(0.61)
<i>OA</i>	0.008***	-0.003**
	(3.51)	(-2.12)
Μ	0.398***	0.977***
	(9.99)	(49.05)
OE	-0.000	-0.003
	(-0.01)	(-0.64)
V	7922	7922
Year & Ind F.E.	Yes	Yes
Adjusted-R ²	0.205	0.541

Panel B: Alternative channels of communication
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	(1)	(2)
Dep. Var. =	RM1	RM2
CSVs	-0.004*	-0.002**
	(-1.81)	(-2.07)
Ln (MKV)	-0.008	-0.012***
	(-1.21)	(-3.52)
МТВ	-0.049***	-0.020***
	(-9.05)	(-6.86)
Big4	-0.026	-0.010
	(-0.99)	(-0.73)
Institution	-0.001*	-0.000
	(-1.84)	(-1.48)
Firm Age	-0.001	-0.000
	(-1.12)	(-0.18)
Analyst	-0.016**	-0.006
	(-2.33)	(-1.64)
NI	-0.738***	-0.489***
	(-9.00)	(-12.05)
Suspect	0.017*	0.005
	(1.93)	(1.17)
NOA	0.007**	-0.003**
	(2.50)	(-2.20)
AM	0.372***	0.933***
	(7.40)	(37.05)
SOE	0.001	-0.002
	(0.10)	(-0.34)
	-0.004*	-0.002**
N	7922	7922
Year & Ind F.E.	Yes	Yes
Adjusted-R ²	0.177	0.529

This table reports the results of the robustness checks. Panel A adopts three alternative CSV measures, Panel B controls for three alternative channels of communication and Panel C adopts a propensity score matching process. In Panel A, columns (1) and (2), *Ln (Visit People)* is defined as the natural logarithm of one plus the number of site visitors for a specific firm in year t. In columns (3) and (4), *CSV Dummy* is an indicator variable that indicates whether the company has at least one site visit in year t, and zero otherwise. In columns (5) and (6), we repeat the baseline regression and restrict the sample to firms that receive at least one visit in the year. In Panel B, *Web Relation* indicates whether the company's website has an investor relations section; *Web Consultant* indicates whether the firm has an official WeChat or Weibo account (two of the most popular social media platforms in China). In Panel C, we repeat the baseline regression using a propensity score matched sample. The t-values are based on robust standard errors and clustered by firm, then reported in parentheses. All variables are defined in Appendix B. Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively.

	(1)	(2)	(3)	(4)
	Non-Manufacture Firms		Manufacture Firms	
Dep. Var. =	RM1	RM2	RM1	RM2
Ln (CSVs)	0.000	-0.000	-0.007***	-0.004***
	(0.04)	(-0.07)	(-3.15)	(-4.08)
N	2514	2514	5408	5408
Controls	Yes	Yes	Yes	Yes
Year & Ind F.E.	Yes	Yes	Yes	Yes
Adjusted-R ²	0.157	0.502	0.209	0.548

Table 5: Cross-Sectional Analysis: Effect of Complexity

Panel B: R&D Intensity

	(1)	(2)	(3)	(4)
	Low R&I	Low R&D Intensity		D Intensity
Dep. Var. =	RM1	RM2	RM1 RM2	
Ln (CSVs)	-0.003	-0.001	-0.006**	-0.005***
	(-1.19)	(-0.42)	(-2.16)	(-3.74)
N	3206	3206	3205	3205
Controls	Yes	Yes	Yes	Yes
Year & Ind F.E.	Yes	Yes	Yes	Yes
$Adjusted$ - R^2	0.159	0.553	0.239	0.545

This table presents the results that examine the moderating effects of complexity on the relation between CSVs and real earnings management. We use manufacturing firm and R&D intensity to measure complexity. In Panel A, we split the sample based on whether the firm is in the manufacturing industry. In columns (1) and (2), we include only non-manufacturing firms, i.e., low complexity firms. In columns (3) and (4), we include only manufacturing firms, i.e., high complexity firms. In Panel B, we split the sample into high and low R&D Intensity groups based on the median R&D intensity value. In columns (1) and (2), we include only low R&D Intensity firms, i.e., low complexity firms. In columns (1) and (2), we include only low R&D Intensity firms, i.e., low complexity firms. In columns (1) and (2), we include only low R&D Intensity firms, i.e., low complexity firms. In columns (3) and (4), we include only low R&D Intensity firms, i.e., low complexity firms. In columns (3) and (4), we include only low R&D Intensity firms, i.e., low complexity firms. In columns (3) and (4), we include only low R&D Intensity firms, i.e., high complexity firms. The t-values are based on robust standard errors and clustered by firm, then reported in parentheses. All variables are defined in Appendix B. Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively.

	(1)	(2)	(3)	(4)
	Big	Firms	Small	Firms
Dep. Var. =	RM1	RM2	RM1	RM2
Ln (CSVs)	-0.004	-0.002	-0.008***	-0.005***
	(-1.55)	(-1.31)	(-3.46)	(-4.85)
N	3961	3961	3961	3961
Controls	Yes	Yes	Yes	Yes
Year & Ind F.E.	Yes	Yes	Yes	Yes
Adjusted-R ²	0.217	0.531	0.204	0.557

Table 6:	Cross-Sectional Analysis: Effect of Information Asymmetry
Panel A. Company Size	

	(1)	(2)	(3)	(4)
	With Top Board Secretary		Without Top Board Secretary	
Dep. Var. =	RM1	RM2	RM1	RM2
Ln (CSVs)	-0.002	-0.003	-0.005***	-0.003***
	(-0.44)	(-1.27)	(-3.11)	(-3.59)
N	660	660	7261	7261
Controls	Yes	Yes	Yes	Yes
Year & Ind F.E.	Yes	Yes	Yes	Yes
Adjusted-R ²	0.292	0.609	0.190	0.528

This table presents the results that examine the moderating effects of information asymmetry. We use firm size and whether or not the firm has a top board secretary as a proxy for information asymmetry. In Panel A, we split the sample into large and small firms based on the median value of the firm's book value of total assets. In columns (1) and (2), we include only large firms, i.e., low information asymmetry firms. In columns (3) and (4), we include only small firms, i.e., high information asymmetry firms. In Panel B, we split the sample based on whether the firm has a "top board secretary". In columns (1) and (2), we include only firms as "top board secretary". In columns (1) and (2), we include only firms with a top board secretary, i.e., low information asymmetry firms. In columns (3) and (4), we include only firms without a top board secretary, i.e., high information asymmetry firms. The t-values are based on robust standard errors and clustered by firm, then reported in parentheses. All variables are defined in Appendix B. Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively.

		(1)	(2)
Dep. Var. =		RM1	RM2
1)	Ln (1+Number of Individual Investors' CSVs)	-0.004	-0.003
		(-0.55)	(-0.84)
2)	Ln (1+ Number of Insurance Companies' CSVs)	-0.015***	-0.010***
		(-3.17)	(-3.82)
3)	Ln (1+ Number of Trust Companies' CSVs)	-0.014	-0.009*
		(-1.46)	(-1.94)
4)	Ln (1+ Number of Mutual Funds' CSVs)	-0.007***	-0.004***
		(-3.05)	(-3.76)
5)	Ln (1+ Number of Other Visitors' CSVs)	-0.009***	-0.006***
		(-3.08)	(-3.94)
6)	Ln (1+ Number of Media CSVs)	0.009*	0.005*
		(1.74)	(1.93)
7)	Ln (1+ Number of Government Agencies' CSVs)	-0.004	-0.002
		(-0.34)	(-0.32)
8)	Ln (1+Number of Foreign Institutions' CSVs)	-0.022***	-0.014***
		(-3.94)	(-5.30)
9)	Ln (1+ Number of Private Funds' CSVs)	-0.009***	-0.005***
		(-2.74)	(-3.16)
10)	Ln (1+ Number of Securities Agencies' CSVs)	-0.007***	-0.004***
		(-3.11)	(-3.77)
11)	Ln (1+Number of Finance Companies' CSVs)	0.000	0.000
		(0.03)	(0.00)
12)	Ln (1+ Number of Asset Management Companies' CSVs)	-0.013***	-0.008***
		(-2.62)	(-3.25)
13)	Ln (1+Number of Banks' CSVs)	-0.021***	-0.016***
		(-2.85)	(-3.94)
	Controls	Yes	Yes
	Year & Ind F.E.	Yes	Yes

Table 7:	Types	of Visitors
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This table presents the results that examine the various types of site visitors' different impacts on real earnings management. Each row contains two different regressions: The dependent variables in columns (1) and (2) are *RM1* and *RM2*, respectively. There are 13 visitor types. We aggregate the frequency of the site visits from each type to construct an independent variable of interest for each. The t-values are based on robust standard errors and clustered by firm, then reported in parentheses. All variables are defined in Appendix B. Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively.

	(1)	(2)	(3)	(4)
Dep. Var. =	AM	D_Restate	Managerial Misconduct	Corporate Misconduct
Ln (CSVs)	0.000	0.024	-0.179***	-0.128***
	(0.15)	(0.49)	(-3.85)	(-2.86)
Ln (MKV)	0.008***	0.175	0.159	0.203*
	(4.18)	(1.55)	(1.29)	(1.77)
MTB	-0.005***	0.039	0.196*	0.257**
	(-2.87)	(0.40)	(1.85)	(2.54)
Big4	-0.018**	-0.953*	-0.148	-0.398
	(-2.26)	(-1.88)	(-0.17)	(-0.48)
Institution	-0.000	-0.029***	-0.019	-0.033**
	(-0.40)	(-2.87)	(-1.43)	(-2.27)
Firm Age	-0.001**	0.014	0.036***	0.030**
	(-2.38)	(1.07)	(2.64)	(2.23)
Analyst	-0.004	-0.068	-0.173	-0.330*
	(-1.47)	(-0.36)	(-0.96)	(-1.82)
NI	-0.002	-4.908***	-6.081***	-6.084***
	(-0.08)	(-4.58)	(-4.82)	(-4.85)
Suspect	0.007*	0.486**	0.247	0.323
	(1.91)	(2.26)	(0.94)	(1.29)
NOA	0.009***	0.005	-0.013	0.017
	(8.44)	(0.10)	(-0.24)	(0.34)
AM		0.462	0.507	1.822*
		(0.55)	(0.51)	(1.91)
SOE	-0.005	-0.157	-0.581***	-0.822***
	(-1.53)	(-0.97)	(-2.99)	(-4.26)
N	7922	7922	7334	7334
Year & Ind F.E.	Yes	Yes	Yes	Yes
Persedo/Adjusted-R ²	0.026	0.070	0.087	0.088

Table 8: Additional Analysis

This table presents the regression results for the effect of CSVs on accrual-based earnings management, accounting restatements, management, and corporate misconduct. The dependent variable in column (1), *AM*, is estimated following Kothari's (2005) modified Jones model. The dependent variable in column (2) is *D_Restate*, an indicator variable that equals 1 if the firm has at least one restatement event in a given year, and 0 otherwise. The dependent variable in column (3) is *Managerial Misconduct*, an indicator variable that equals 1 if a manager violates regulations in a given year, and 0 otherwise. The dependent variable in column (3) is *Managerial Misconduct*, an indicator variable that equals 1 if a manager violates regulations in a given year, and 0 otherwise. The dependent variable in column (4) is *Corporate Misconduct*, an indicator variable that equals 1 if the firm violates regulations in a given year, and 0 otherwise. The t-values are based on robust standard errors and clustered by firm, then reported in parentheses. All variables are defined in Appendix B. Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively.