Does the random inspection reduce audit opinion shopping?

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ABSTRACT
The China Securities Regulatory Commission (CSRC) has randomly selected two audit firms each year to check their problems in management and internal control since 2016. Using the random inspections from 2016 to 2018, we construct a staggered DID model and find that the possibility of audit firms engaging in audit opinion shopping decreases after they are inspected. To explore the underlying logic, we document that: (1) the random inspections strengthened audit firms’ management of branch offices, resulting in a more pronounced effect on the practice of branch audit offices; and (2) the policy improved audit firms’ internal control, leading to more pronounced effect in audit firms with a heavy workload and loose control. Further, we show that punishments following the inspections strengthen the basic effect, while the effect of random inspections would be weakened for the big 10 audit firms.

1. Introduction
Audit opinion shopping is an important research topic for accounting academics, and also a significant issue of concern to governments worldwide (Wu & Tan, 2005). Existing literature has confirmed a large number of influencing factors of audit opinion shopping from the perspective of client demand and audit supply (Cao & Li, 2019; Carey & Simnett, 2006; S. Chen et al., 2010; Kim et al., 2014; Li & Zhao, 2014; Xie et al., 2018). However, audit supervision can directly affect the success of audit opinion shopping (M. DeFond & Zhang, 2014). Wu (2005) discussed the regulatory strategy of audit opinion shopping, but there are still few studies to provide relevant empirical evidence.

Based on the random inspection policy issued by the China Securities Regulatory Commission in 2015, we examine the impact of audit supervision on audit opinion shopping. Under the random inspection policy, the Accounting Department of the CSRC randomly selects two audit firms every year to conduct on-site inspections. At the same time, inspectors are also randomly selected. The inspection content mainly includes the integrated management and the internal control system of audit quality, instead of limiting to the practice quality of a single audit project. The supporting punishments are severe, and the securities business qualification of the firm can be revoked in extreme
cases. Compared with the previous regulatory measures, the random inspection policy takes into account the in-process supervision, and is more independent and systematic.

We believe that if the random inspection policy is effective, it will help to improve the internal governance of the firm, thereby inhibiting auditors from participating in audit opinion shopping. To test this hypothesis, we select the client samples of the firms that were spot-checked from 2016 to 2018 as the treatment group, and use the PSM method to obtain the control group by 1:1 matching from the client samples of the firms that were not spot-checked, then construct a staggered DID model. We find that the random inspection policy reduces the probability of spot-checked auditor firms participating in opinion shopping. After controlling the fixed effect at the audit firm and customer level, excluding the inspection activities of other supervisory agencies, and the sample of listed companies that were spot-checked by securities regulators, the conclusion is still robust. Further researches find that the basic effect is more pronounced when the spot-checked firms are penalised; however, the effect is weakened for big 10 audit firms. According to the mechanism tests, the effect is more pronounced in the projects practiced by branch offices and audit firms where auditors have a heavy workload. In addition, in the random inspections in 2017 and 2018, two years after the introduction of the policy, we still find evidence that random inspections inhibit audit opinion shopping, but no significant difference is found when comparing the changes in the behaviour of opinion shopping before and after the introduction of the policy. This shows that it is the implementation of the random inspection policy, rather than the introduction, has played a role in inhibiting audit opinion shopping.

The main contributions of this paper are as follows: First, it expands the research on the motivation of audit opinion shopping from the perspective of audit supervision. Most of the existing literature confirms that audit clients are more motivated to purchase audit opinions under some specific circumstances from the perspective of customer demand, or discuss whether the characteristics of the firm change the possibility of their participation in opinion shopping from the perspective of audit supply. The effectiveness of independent auditors depends on client demand, audit supply, and audit supervision (M. DeFond & Zhang, 2014). However, few studies have explored the determinants of audit opinion shopping from the perspective of audit supervision, especially since there is no literature to provide empirical conclusions on this issue. This paper supplements the empirical evidence on the motivation of audit opinion shopping from the perspective of audit supervision.

Second, this paper provides a reference for optimising the audit supervision practice. The continuous optimisation of the audit supervision practice needs to consider the market’s problems at different stages, and make trade-offs between standards such as independence, professionalism, timeliness, systematicness, and cost-effectiveness. The empirical research of various regulatory measures in the existing literature is essentially examining whether the trade-off between different standards by regulators has achieved the desired effect. For example, in recent years, a large body of literature has conducted research based on the background of the conversion of AICPA peer reviews to PCAOB inspection, discussing how to balance independence and professionalism standards in

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1As of the end of 2017, there were 8,560 audit firms in China, but only 40 of them were qualified for securities and futures related businesses. The value of an audit licence is self-evident.
audit supervision (DeFond & Lennox, 2017; Hanlon & Shroff, 2022). The random inspection policy issued by the CSRC emphasises the important role of timeliness (expanding the supervision work to the in-process stage) and systematic (focusing on the internal management of the firm rather than specific project) in audit supervision. The result can provide a new reference for optimising the audit supervision practice.

Third, this paper enriches the empirical evidence of audit supervision in China’s securities market. Under the reform of the registration-based initial public offering (IPO) system, China’s securities market is undergoing tremendous changes. The problems faced by audit firms are becoming more and more complicated, requiring audit supervision to be updated and improved accordingly. Thus, testing the policy effects of different regulatory measures and providing suggestions for the continuous optimisation of audit supervision have also become a long-term work of Chinese accounting scholars (Li et al., 2016; Zhang et al., 2018). Taking the random inspection policy of the accounting department of CSRC as a representative, the thinking of auditing supervision in China is expanding from ex-post to the in-process, from specific projects to the overall system design and implementation of the firm. This paper examines the actual effect of this new supervision idea, which will help enrich the related research on the impact of audit supervision in China.

2. Literature review, institutional background, and research assumptions

2.1. Literature review

2.1.1. Audit opinion shopping

Audit opinion shopping refers to the fact that the client company obtains a favourable but low-quality audit opinion in a certain way (Wu, 2005). It is common practice for companies to seek other auditors with a more acquiescent attitude when incumbent auditors are likely to issue unfavourable audit opinions (F. Chen et al., 2016). Opinion shopping will reduce the quality of auditing and the usefulness of accounting information, allowing operators to obtain private interests by increasing the level of information asymmetry, thereby damaging the legitimate rights and interests of shareholders and the efficiency of the capital market (Chung et al., 2019). Therefore, opinion shopping has always been an important topic of domestic and foreign accounting research, and it is also a major issue of concern to governments all over the world (Lennox, 2000; Wu & Tan, 2005).

Early research focused on whether companies successfully engage in opinion shopping. Empirically, they mostly made assumptions from two perspectives, audit firm (or auditor) switching or audit fees, but no consensus has been reached. On the one hand, the research conclusion based on audit firm (or auditor) switching is mixed. Krishnan and Stephens (1995) find that the switching of auditors did not bring about a significant improvement in the audit opinion, and based on this, they believed that there was no audit opinion shopping behaviour. Lennox (2000) believes that their approach misses the unobserved behaviour of audit opinion shopping from the incumbent auditor, and by constructing a model to predict the types of audit opinions when the enterprise makes different switching decisions, it is confirmed that the client enterprise has indeed

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2There is also a view that firms purchase opinions to seek more accurate audit reports (Dye, 1991).
successfully engaged in audit opinions. Research conclusions based on the Chinese context are also divergent (L. N. Wu et al., 2013; Wu & Tan, 2005). On the other hand, studies inferring from the perspective of audit fees are also inconclusive. Simon and Francis (1988) find that the increase in audit fees is significantly positively related to the improvement of audit opinions. Empirical research in the Chinese context also supports this conclusion (Tang, 2007). But Francis (2011) fails to find a correlation between abnormal audit fees and audit opinions.

With further research, the literature in recent years has focused on the influencing factors of opinion shopping. From the perspective of audit clients, the research finds that after the restatement of financial statements (Li & Zhao, 2014), when there is analyst tracking (Zhai et al., 2016), one year before the management equity incentive (Chen & Cao, 2018; Kim et al., 2014; Xie et al., 2018), and when the supply chain is highly concentrated (S. Chen et al., 2010; Xue et al., 2018), there are a large number of related-party transactions (Chen, 2020) or the proportion of equity pledge of controlling shareholders is high (Cao & Li, 2019), the enterprise will have a stronger incentive to purchase audit opinions. While the audit committee (Carcello & Neal, 2003; Xia & Chen, 2006) and media supervision (Yao, 2018) can play a certain balance.

The research conducted from the perspective of the audit firm shows that the tenure (Carey & Simnett, 2006), business concentration (Chan et al., 2006), industry expertise (Chi & Chin, 2011), and organisational form of the audit firm (X. J. Liu & Wang, 2014; Liu et al., 2015), as well as the intensity of competition in the audit market (Newton et al., 2016) and the degree of dependence on clients (F. Chen et al., 2016), will all affect the risk awareness of the accounting firm and ultimately change its decision to participate in the opinion shopping.

M. DeFond and Zhang (2014) argue that the effectiveness of independent audits not only depends on client demand and audit supply, but is also directly affected by audit supervision. Especially in the Chinese market, where the legal litigation mechanism can only play a limited role, audit supervision is particularly important in restricting audit firms and CPAs (F. Chen et al., 2016). By establishing a dynamic game model, Wu (2005) explored different regulatory strategies for opinion shopping behaviour. But so far, few studies have provided direct empirical evidence on this issue.

### 2.1.2. Audit supervision

Examining the specific effects of different supervisory bodies and supervisory measures is one of the leading research contents in auditing. Industry self-regulation and government inspection are the two primary forms of audit supervision. Taking the United States as an example, before the introduction of the Sarbanes-Oxley Act, the auditing market mainly conducted self-monitoring through peer reviews regularly organised by the American Institute of Certified Public Accountants (AICPA). However, the firms involved in peer review generally believe that the review is only a superficial work without substantial effect (McCabe et al., 1993), and there is also controversy over the research on the regulatory effect of peer review (Ehlen & Welker, 1996; Grant et al., 1996).

After the Sarbanes-Oxley Act was enacted, the United States established the Public Company Accounting Oversight Board (PCAOB). Independent inspections by PCAOB have replaced peer review as the primary form of audit supervision. Existing literature shows that PCAOB inspection improves the audit quality of accounting firms by promoting the
improvement of the audit process and defects of quality control system (Gramling et al., 2011; Hanlon & Shroff, 2022), as well as forcing low-quality firms to withdraw from the market (DeFond & Lennox, 2011), and provides endorsement for the auditing capabilities of audit firms to help them increase market share (Aobdia & Shroff, 2017). However, the industry is more critical of PCAOB inspection because they believe that inspectors focus too much on standards and lack professional knowledge (DeFond, 2010). The auditors are awed by the coercive force of PCAOB and have to adopt the impression management strategy and execute too many useless procedures (Westermann et al., 2019).

Domestic research on the effect of audit supervision also starts from different supervision bodies. In China, the supervision of audit firms has always been dominated by government departments, supplemented by the self-discipline of industry associations. Different regulatory measurements have their advantages and disadvantages. The Ministry of Finance and the CSRC are the central administrative supervision bodies. The Ministry of Finance divides the scope of supervision according to the Commissioner's Office and organises regular inspections, while the CSRC conducts inspections for special work or cases. Although the supervision from government departments has a strong deterrent effect, the fixed division of responsibilities of the Commissioner's Office may damage the independence of inspection work, while the special inspections of the CSRC are not systematic, and the role of special investigations is limited to post-event remedies. Self-discipline is the regular quality inspection of the CICPA. Likewise, it is challenging to ensure independence for mutual checks between firms. Moreover, the fundamental drawback of industry self-discipline lies in the lack of deterrence.

Extensive literature examines the regulatory effects of the CSRC's penalties on audit firms and auditors. Most scholars believe that administrative penalties have significantly improved the audit quality of firms and auditors (Fang, 2011; X. X. Liu & Li, 2013). However, some scholars hold the opposite view, believing that administrative punishment has not significantly improved the quality of accounting information of listed companies (Wang et al., 2011; Li et al., 2016). In addition, some literature focus on the effect of the CICPA's self-regulatory measures. X. Wu et al. (2014) propose that the interview system of the CICPA urges the interviewed auditors to implement more robust audit work for clients who have been alerted by risks. Liu (2016) confirms that the CICPA inspection has improved the audit quality of accounting firms.

It is the common desire of all parties to improve auditing quality through effective supervision measures. However, the implementation effect of audit supervision is affected by complex factors. As the market develops, firms will be ‘immune’ to some regulatory measures. Therefore, it is long-term work to urge audit firms to play the role of forensics and ensure the healthy operation of the capital market by testing the actual effects of different supervision methods and continuously optimising the supervision strategy.

2.2. Institutional background

To deepen the reform of the administrative system and regulate market law enforcement, the General Office of the State Council issued a document in July 2015 requiring all ministries and commissions to formulate a list of inspection items, and vigorously promote random inspections during and after the event. Based on this, the CSRC has formulated a list of random inspection items covering
17 items, and comprehensively carried out random inspections in 2016. The accounting department of the CSRC shall be responsible for the random inspections of accounting firms. The sampling process adopts a ‘double random’ method, that is, the inspection objects and inspectors are selected by random sampling. The inspection was led by randomly selected local regulatory bureaus. There are a total of 40 accounting firms with securities qualifications, and at a rate of 5% every year, 2 firms are selected for a comprehensive inspection annually.

The inspections do not aim at the quality of specific audit engagement. They mainly focus on integrated management and the internal control of audit quality. The inspection items of the integrated management include: whether the head office and branch office are unified in terms of rules and regulations, personnel and financial management, technical standards and information system, and whether the branch office has sufficient staffing and professional capabilities. The inspection of internal control is divided into two aspects, the construction of internal control system and the implementation of internal control procedures. In addition, the inspection methods are diversified, including personnel interviews, data analysis, business sampling, etc. In response to the problems found, the audit firm is urged to adopt effective measures for timely rectification.

From 2016 to 2018, six audit firms were inspected. The number of clients of these six firms in 2018 accounted for about 15% of A-share listed companies. The integration problems of the firm are mainly reflected in the budget and asset system are not perfect, the charging standard is not implemented in place, the partner’s salary and profit distribution are determined by the branch, etc.

The main problems in internal control are insufficient staffing, formal internal control workflow, and failure of electronic work papers. Among them, two firms were punished for their severe problems. Most of the remaining problems were rectified within the time limit.

2.3. Research hypothesis

Financial statements are the most important way for companies to communicate with investors. Companies and managers are motivated to send favourable signals to investors through opinion shopping for their interests. However, the success of opinion shopping depends not only on the client’s demand, but also on the audit firm’s willingness and ability to cooperate.

On the one hand, whether a firm is willing to engage in opinion shopping is based on its trade-off between benefits and costs. From the perspective of revenue, the domestic audit market is highly competitive, and meeting client needs can help firms retain clients, increase fees, and even expand business (L. N. Wu et al., 2013; Tang, 2007). From the perspective of cost, opinion shopping increases the probability of audit failure, which will seriously damage the firm’s reputation and increase the risk of litigation and penalties (F. Chen et al., 2016). For branch offices, the consideration from the perspective of income often prevails.

On the other hand, whether auditors engage in opinion shopping depends on the environment, and the firm’s internal control system (DeFond & Lennox, 2017). If there are problems and deficiencies in the firm’s quality control system, objective conditions are
created for the auditor’s willingness to cooperate. Moreover, the internal control practice often yields to economic interests in the specific business process. The internal control system becomes a mere formality, especially when the number of auditors is disproportionate to the business scale.

We argue that the random inspection policy will reduce the possibility of audit firms engaging in audit opinion shopping. Firstly, the random inspection policy strengthens the integrated management between the head office and the branch office, especially the collection of the income of the branch offices to the head office for distribution, which can effectively reduce the aggressive behaviour of the auditors of the branch offices. Therefore, this can effectively reduce the willingness of branches to engage in opinion shopping. Secondly, the random inspection policy restricts auditors’ engagement in opinion shopping by implementing an effective quality control system within the firm. In addition, the ‘double random’ method reduces the firm’s feasibility to cover up problems and evade accountability through various social connections. Severe punishment measures, including suspension or even cancellation of securities business qualification, provide a guarantee for the effectiveness of the inspection policy. To sum up, we put forward hypothesis 1.

**H1: The random inspection policy will reduce the possibility of audit firms engaging in audit opinion shopping.**

### 3. Research design

#### 3.1. Sample selection

To test the impact of the random inspection policy on opinion shopping, we select three random inspections organised by the CSRC from 2016 to 2018 as treatment events to build a Time-varying DID model. The sample period is set from 2013 to 2018, covering three years before and after the implementation of the random inspection system. Relevant data of listed companies and audit firms are obtained from the CSMAR database. Based on the original data, the financial industry, ST companies, clients with default variable values, as well as clients of firms and accountants who were punished by other regulatory entities during the sample period are excluded. 2,351 observations are obtained. We adopt the PSM method with the characteristics of audit firms and clients, to get matched control groups from the same industry-year. The final sample includes 4,634 observations.

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3What this paper attempts to test is the marginal benefit of random inspections carried out by the Accounting Department of the CSRC. Through this sample screening operation, the interference of other supervisory entities or other regulatory matters on the effect of random inspections can be excluded to a certain extent. The ideal situation is to be able to obtain the scope of inspection by other subjects or matters, but since the inspection scope of the CICPA or the Ministry of Finance could not be obtained from public channels, this paper uses the case of punishment as a substitute, and the data comes from the CSMAR audit research sub-database.
3.2. Empirical model and variable description

We follow the research framework of Lennox (2000) to determine whether companies successfully engage in opinion shopping. First, we get the probability \( Q \) of the client firm to obtain a modified audit opinion (MAO) according to model (1) and calculate the difference between obtaining MAO with and without switching the audit firm \( \Delta Q = Q_{S=1} - Q_{S=0} \). If the difference is negative, it means that the client reduces the probability of obtaining MAO by switching the firm.

\[
Q_{it} = y_0 + y_1 S_{it} + y_2 X_{it} + y_3 X_{it} S_{it} + y_4 Q_{it-1} + y_5 Q_{it-1} S_{it} + Year + Industry + \epsilon_{it} \quad (1)
\]

In model (1), the dependent variable \( Q_{it} \) is an indicator variable that equals 1 if the company \( i \) receives an MAO in year \( t \) and 0 if it receives a clean audit opinion. \( S_{it} \) is an indicator for an audit firm switch, which takes the value of 1 if the company \( i \) is audited by a new audit firm in year \( t \), and 0 otherwise. The variable description and definition are shown in Appendix (see Table A1).

Second, we use this probability difference \( \Delta Q \) to explain the switch of audit firm \( \delta \), as shown in model (2). If the estimated coefficient of \( \beta_1 \) in the model (2) is negative, it means that if switching the firm can greatly reduce the probability of obtaining MAO, then the client is more likely to do so. That is, there is a phenomenon of opinion shopping.

\[
S_{it} = \beta_0 + \beta_1 \Delta Q_{it} + \beta_2 X_{it} + Year + Industry + \epsilon_{it} \quad (2)
\]

To test Hypothesis 1, we construct a dummy variable \( \text{Check} \). For customers of the audit firms under random inspection in the year after inspection, this variable equals the value of 1 and 0 otherwise. Then, the variable \( \text{Check} \) is added to the model (2) to obtain model (3). In model (3), the dependent variable \( S_{it} \) measures whether the company has switched the audit firm. The interaction term of \( \Delta Q_{it} \) and \( \text{Check} \) is added to the model. The control variable is consistent with the model (1). At the same time, the model controls the fixed effects of year, audit firm, and listed company, and clusters to the listed company level. If \( \rho_3 \) is significantly positive, indicating that the implementation of the random inspection policy has reduced the firm’s engagement in opinion shopping, hypothesis 1b is supported; otherwise, hypothesis 1a is supported.

\[
S_{it} = \rho_0 + \rho_1 \Delta Q_{it} + \rho_2 \text{Check}_{it} + \rho_3 \Delta Q_{it} \times \text{Check}_{it} + \rho_4 X_{it} + Year + Auditor + Client + \epsilon_{it} \quad (3)
\]

4. Empirical results

4.1. Descriptive statistics

Table 1 reports descriptive statistical results. Column A is the between-group difference test for each variable before and after PSM matching. It can be seen that there are significant differences between the treatment group and control group before matching, whereas differences become statistically insignificant after matching, which shows that the PSM results have high validity. Column B is the descriptive statistics of the main
Table 1. Descriptive statistics.

| Variables  | Before Matching | After Matching |
|------------|----------------|---------------|
|            | Treat = 0 | Treat = 1 | Diff. | T value | Treat = 0 | Treat = 1 | Diff. | T value |
| Size       | 22.210   | 22.545   | −0.335 | −10.70***   | 22.587   | 22.555   | 0.032 | 0.70 |
| Age        | 2.832    | 2.841    | −0.009 | −1.34        | 2.854    | 2.844    | 0.010 | 1.00 |
| Lev        | 0.427    | 0.465    | −0.039 | −8.08***     | 0.466    | 0.466    | 0.000 | 0.02 |
| ROC        | 0.205    | 0.108    | 0.097  | 4.47***      | 0.126    | 0.111    | 0.015 | 0.52 |
| CF         | 0.041    | 0.040    | 0.001  | 0.56         | 0.042    | 0.040    | 0.002 | 1.06 |
| DIRS       | 0.101    | 0.081    | 0.020  | 5.52***      | 0.079    | 0.081    | −0.002 | −0.50 |
| LARS       | 46.818   | 48.746   | −1.928 | −5.33***     | 0.483    | 0.488    | −0.006 | −1.13 |
| Big10      | 0.631    | 0.556    | 0.075  | 7.90***      | 0.548    | 0.541    | 0.007 | 0.48 |
| RegCap     | 7.775    | 8.033    | −0.258 | −11.10***    | 7.885    | 8.034    | −0.149 | −1.35 |
| History    | 2.039    | 2.467    | −0.428 | −43.18***    | 2.253    | 2.462    | −0.209 | −16.73*** |
| OfficeNum  | 3.023    | 3.117    | −0.094 | −8.20***     | 3.046    | 3.116    | −0.070 | −1.38 |

Column B: Descriptive statistics after matching

| Variables  | N   | Mean | S.D. | Min   | P25 | P50 | P75 | Max |
|------------|-----|------|------|-------|-----|-----|-----|-----|
| Switch     | 4634 | 0.109 | 0.312 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 |
| Q          | 4634 | 0.030 | 0.169 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 |
| Check      | 4634 | 0.223 | 0.417 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 |
| Age        | 4634 | 2.849 | 0.346 | 1.609 | 2.708 | 2.890 | 3.091 | 3.434 |
| Lev        | 4634 | 0.466 | 0.217 | 0.052 | 0.295 | 0.456 | 0.628 | 0.947 |
| ROC        | 4634 | 0.119 | 0.989 | −5.240 | 0.051 | 0.118 | 0.269 | 4.428 |
| CF         | 4634 | 0.041 | 0.069 | −0.203 | 0.004 | 0.041 | 0.081 | 0.241 |
| DIRS       | 4634 | 0.080 | 0.150 | 0.000 | 0.000 | 0.000 | 0.078 | 0.668 |
| LARS       | 4634 | 0.485 | 0.170 | 0.122 | 0.360 | 0.488 | 0.605 | 0.891 |
| Big10      | 4634 | 0.544 | 0.498 | 0.000 | 0.000 | 1.000 | 1.000 | 1.000 |

variables after matching. The statistical results of variables are all within a reasonable range.

4.2. Basic regression results

Table 2 reports the test results of the staggered DID model. In column (2), the coefficient of ΔQ is significantly negative, while the coefficient of the interaction term ΔQ×Check is significantly positive at the 1% level. This means that the audited firms reduce their shopping behaviour after the year of inspection, which supports Hypothesis 1. Further, we add audit firm-level fixed effects in Columns (3) and (4), and control client fixed effects in columns (5) and (6). The main results are still robust.

4.3. Mechanism tests

In the process of developing the hypothesis, we propose that the branches engaging in opinion shopping have higher returns, lower risks, and stronger willingness. However, the random inspections strengthen the integrated management of the head office and branches by requiring the head office and branches to share the benefits and risks, thus suppressing the intention of the branches to cooperate with customers. According to the audit engagement carried out by the head office or branch office, we conduct a group test...
on the samples. Columns (1) and (2) of Table 3 report the regression results. This result supports our expectations.

Another reason why the random inspections inhibit opinion shopping is that it promotes the internal control system of audit firms, which restricts the auditors’ engagement in opinion shopping. Based on this, we infer that when the number of auditors is disproportionate to the business scale, the number of personnel allocated by the firm for internal control before the random inspection is relatively limited, so the effect of the random inspections will be more obvious.

We count the number of CPAs in each audit office (head office or branch) and the total assets of the audit engagement, and calculate the average amount of audit assets corresponding to each CPA. According to the average of all audit offices, we divided

Table 2. The effect of random inspections on audit opinion shopping.

| Dep. Var.: Switch | Lennox (2000) Model | Audit firm FEs | Client FEs |
|-------------------|---------------------|----------------|------------|
| ΔQ                | −0.649*** (-4.15)   | −0.789*** (-4.35) | −0.589*** (-3.87) | −0.765*** (-4.42) | −0.727*** (-2.40) | −1.069*** (-3.51) |
| ΔQ × Check        | 0.665*** (2.84)     | 0.813*** (3.29)  | 1.195*** (3.74)  |
| Check             | −0.002 (-0.16)      | 0.041** (2.28)   | −0.009 (-0.45)   |
| Lev               | 0.077** (2.51)      | 0.076** (2.52)   | 0.037 (1.24)     | 0.038 (1.31)      | 0.020 (0.31)      | 0.021 (0.34)      |
| ROC               | 0.010* (1.93)       | 0.010** (1.99)   | 0.010* (1.87)    | 0.010* (1.93)     | 0.015** (2.06)    | 0.015** (2.06)    |
| CF                | −0.065 (-0.84)      | −0.068 (-0.88)   | −0.093 (-1.25)   | −0.095 (-1.28)    | 0.030 (0.27)      | 0.020 (0.18)      |
| DIRS              | 0.040 (0.91)        | 0.038 (0.87)     | 0.063 (1.46)     | 0.063 (1.47)      | 0.115 (1.12)      | 0.167 (1.62)      |
| LARS              | 0.030 (0.91)        | 0.030 (0.92)     | 0.023 (0.70)     | 0.023 (0.68)      | 0.022 (0.68)      | 0.008 (-0.19)     |
| Big10             | −0.044*** (-3.99)   | −0.045*** (-4.06) | −0.389*** (-5.86) | −0.398*** (-6.31) | −0.430*** (-3.77) | −0.440*** (-4.18) |

Fixed Effects: Industry, Year
Adj. R²: 2.7% Industry, Year, Audit Firm 8.7% Client, Year, Audit Firm 24.6%
Observations: 4634 4634 4634

Table 3. Mechanism tests.

| Dep Var: Switch | Strengthen the integrated Headquarters branches | Implement internal control requirements Abundant manpower Insufficient manpower |
|-----------------|-----------------------------------------------|--------------------------------------------------------------------------------|
| ΔQ              | −1.433*** (-3.33)                            | −1.758*** (-2.32)                            | −1.036** (-2.51)                             |
| ΔQ × Check      | 0.357 (0.65)                                 | 0.237 (3.31)                                 | 1.533*** (4.04)                              |
| Check           | −0.017 (-0.68)                               | −0.004 (-1.04)                               | −0.026 (-0.15)                               |

p-value: 0.012 0.081
Controls: Included Included Included Included
Fixed Effects: Included Included Included Included
Adj. R²: 51.9% Industry, Year, Audit Firm 35.9% 50.3% 28.1%
Observations: 2295 2339 1477 3157
the samples into two groups, namely abundant manpower (the average audit assets of CPAs are lower than the average value) and insufficient manpower (the average audit assets of CPAs are higher than the average value). Columns (3) and (4) of Table 3 report the regression results. The result also supports our expectations.

4.4. Cross-sectional analyses

The effect of random inspections on opinion shopping varied among firms with different characteristics. For example, well-known firms have established a good reputation in the capital market, bringing them a high audit premium (Choi et al., 2008), so their motivation to engage in opinion shopping is weak. Moreover, well-known firms often have comprehensive internal control systems and a sufficient specialised workforce. Thus, the effect of the random inspection will be weakened. We conduct a group test based on the ranking of audit firms each year. Columns (1) and (2) of Table 4 report the regression results. It shows that only in the engagement audited by the non-big 10, the effect of random inspection is significant, which supports our expectation.

In addition, we argue that the punished firms are less likely to engage in opinion shopping in subsequent audit engagements. This is because the original integration and internal control problems of the firm are relatively serious. Moreover, administrative penalties will increase the firm’s risk awareness (Fang, 2011). We conduct a group test according to whether the firm is punished. Columns (3) and (4) of Table 4 report the regression results.

4.5. The effect of random inspection on audit quality

Further, we provide supplementary evidence by examining the impact of random inspection policy on audit independence and audit quality. Chung et al. (2019) confirm that opinion shopping damages audit independence and reduces audit quality.

Referring to Gul et al. (2013), we construct an indicator of ‘auditors’ conservative tendency’ as a measure of independence. Firstly, we build a model to predict the probability of a client receiving an MAO according to its characteristics such as the scale of assets, company history, return on assets, etc. We control the industry fixed effect and carry out the regression by year. Secondly, the “auditor’s conservatism tendency” is

Table 4. Cross-sectional analyses.

| Dep Var: Switch | (1) | (2) | (3) | (4) |
|-----------------|-----|-----|-----|-----|
|                 | Big 10 | Non-Big 10 | Not punished | Punished after inspections |
| \( \Delta Q \)  | \(-1.229^{**}\) | \(-1.253^{***}\) | \(-1.478^{***}\) | \(-1.433^{***}\) |
|                 | \(-2.31\) | \(-3.30\) | \(-2.87\) | \(-2.98\) |
| \( \Delta Q \times \text{Check} \) | 0.258 | 1.702*** | 0.447 | 1.754*** |
|                 | (0.45) | (4.68) | (1.15) | (4.36) |
| \text{Check}    | 0.016 | 0.015 | 0.023 | -0.008 |
|                 | (0.64) | (-0.47) | (0.85) | (-0.23) |
| \( p \)-value   | 0.009 | 0.014 | 0.009 | 0.014 |
| Control Variables | Included | Included | Included | Included |
| Fixed Effects   | Yes | Yes | Yes | Yes |
| Adj. \( R^2 \)  | 32.9% | 46.3% | 34.7% | 40.4% |
| Observations    | 2521 | 2113 | 2814 | 1820 |
measured by (actual opinion – MAO predicted by the model), denoted by the symbol AC. The higher the value of variable AC, the more conservative the auditor is. The results in Column (1) of Table 5 show that the estimated coefficient of Check is significantly positive at the 1% level, indicating that the auditor’s conservative tendency has improved after the implementation of the random inspection policy.

Next, we use the Type II error of issuing audit reports as another measure of independence. Type II error is an indicator variable that equals 1 when the auditor issues an MAO on the report of the client’s observation year, but the audit client is ST within the following three years. Column (2) of Table 5 runs the regression with the Type II error as the dependent variable. The results are consistent with our expectations.

Furthermore, we use MAO and restatements as measures of audit quality. Column (3) and column (4) of Table 5 show the results. The probability of audit firms issuing MAO has increased, while the probability of client restatements has decreased after random inspections.

4.6. Robustness tests

4.6.1. Dynamic analyses

In this paper, the dynamic effect analysis is used to verify whether the DID model meets the parallel trend requirements. First of all, we set five dummy variables Check[−2], Check [−1], Check[0], Check[1], and Check[2] according to the years before and after the random inspections. Then, these five dummy variables were added to the model (2) after interacting with the variable ΔQ. The results in Table 6 show that the DID model satisfies the parallel trend requirement.
### 4.6.2. Replacing the audit opinion estimation model

We adopt the model of F. Chen et al. (2016) to test the robustness of Hypothesis 1. In F. Chen et al. (2016), they adopted the logic of the Lennox (2000) model, but with different explanatory variables. Table 7 reports the regression results. It can be seen that the results in Table 7 are consistent with those in Table 2, indicating that random inspections inhibit the purchase of audit opinions. The conclusion of this paper remains unchanged.

### 4.6.3. Exclude alternative explanations for capital market stress

The conclusion may have an alternative explanation from the capital market, that is, after the CSRC issued the random inspection policy, the capital market transmitted pressure to the firm or the management, causing audit firms to reduce their willingness to cooperate with clients, or the managers to reduce the motivation to buy clean audit opinions, which is ultimately manifested in the negative correlation between the random inspection policy and the opinion shopping. If this explanation holds, a reasonable expectation is that, after the CSRC announces the target of the inspections, the client shares of the firm

**Table 6. Dynamic analyses.**

| Dep. Var.: Switch | (1) Lennox (2000) Model | (2) Audit firm FEs | (3) Client FEs |
|-------------------|-------------------------|-------------------|----------------|
| ΔQ                | −1.147***               | −1.085***         | −1.451***      |
|                   | (−3.98)                 | (−3.83)           | (−3.73)        |
| ΔQ × Check[−2]    | 0.178                   | 0.204             | 0.115          |
|                   | (0.42)                  | (0.49)            | (0.24)         |
| ΔQ × Check[−1]    | 0.571                   | 0.531             | 0.821          |
|                   | (1.42)                  | (1.37)            | (1.63)         |
| ΔQ × Check[0]     | 0.819***                | 0.885***          | 1.307***       |
|                   | (2.25)                  | (2.41)            | (3.03)         |
| ΔQ × Check[1]     | 0.872**                 | 0.822**           | 1.175**        |
|                   | (2.29)                  | (2.14)            | (2.29)         |
| ΔQ × Check[2]     | 0.882**                 | 0.879**           | 1.724***       |
|                   | (2.11)                  | (2.15)            | (3.45)         |

| Control Variables | Included Industry, Year | Included Industry, Year, Audit Firm | Included Client, Year, Audit Firm |
|-------------------|-------------------------|--------------------------------------|----------------------------------|
| Adj. R²           | 3.0%                    | 9.0%                                 | 25.1%                            |
| Observations      | 4634                    | 4634                                 | 4634                             |

**Table 7. Robustness tests: F. Chen et al. (2016)'s model.**

| Dep. Var.: Switch | (1) F. Chen et al. (2016) | (2) + Audit firm FEs | (3) + Client FEs |
|-------------------|---------------------------|----------------------|------------------|
| ΔQ                | −0.176**                  | −0.307***            | −0.203**         |
|                   | (−2.20)                   | (−3.37)              | (−2.53)          |
| ΔQ × Check        | 0.491***                  | 0.511***             | 0.927***         |
|                   | (3.01)                    | (3.14)               | (3.46)           |
| Check             | −0.003                    | 0.026                | −0.002           |
|                   | (−0.26)                   | (1.62)               | (−0.07)          |

| Control Variables | Included Industry, Year | Included Industry, Year, Audit Firm | Included Client, Year, Audit Firm |
|-------------------|-------------------------|--------------------------------------|----------------------------------|
| Adj. R²           | 34.6%                   | 34.7%                                | 35.3%                            |
| Observations      | 4634                    | 4634                                 | 4634                             |
under inspection will have significantly increased trading volume and significantly negative abnormal returns (Polk & Sapienza, 2008).

We examine the changes in trading volume and abnormal returns on the shares of clients of the firms that were checked before and after the inspection announcement. Specifically, we only retain the treated sample \((Treat = 1)\) and its matching reference sample \((Treat = 0)\) that were randomly inspected from 2016 to 2018, and construct two new variables: (1) \(\Delta \text{Turnover}\), the difference between the turnover rates of the three trading days before and after the announcement date; (2) \(\text{CAR}[−3,+3]\), the abnormal return of shares on the three trading days before and after the announcement date. Then we conduct a group test. The results in Table 8 show that the coefficient of \(Treat\) is not statistically significant, which is inconsistent with the expected result explained by the capital market pressure.

### 4.6.4. Other robustness checks

Firstly, we exclude the clients who switch their firms after being checked. The negative correlation between random inspections and opinion shopping may be the result of clients choosing to switch firms. The results are shown in columns (1) and (2) of Table 9.

Secondly, we exclude the listed companies that were inspected by other regulatory bodies. Here, we further remove the listed companies covered by other inspections by securities regulators (not the random inspections discussed in this paper) and rerun the regression.\(^4\) Columns (3) and (4) of Table 9 show that the results are robust.

Thirdly, we consider the impact of the CSRC’s dispatched offices and make the following test. On the one hand, we remove clients of the audit firms inspected by the local securities regulatory bureau within the jurisdiction and rerun the basic regression. The results are reported in columns (5) and (6) of Table 9. On the other hand, we select the clients of the audit firm inspected by the local securities regulatory bureau within the jurisdiction as the treatment group, and the clients of the audit firm not inspected within the jurisdiction as the control group to rerun the regression. The results are reported in columns (7) and (8) of Table 9. In conclusion, the random inspections of the local securities regulatory bureau do not affect our results, possibly due to the limited scope of inspections to individual engagement.

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\(^4\)This article cannot obtain a list of all listed companies inspected by securities regulators in each year from public sources, so a sample of those punished by securities regulators is used as a substitute. This practice is based on the high correlation between inspections and penalties. However, it should be noted that: first, the scope of the penalty sample is relatively small compared to the inspection sample; second, the penalty data does not provide the year in which the inspection work was carried out, only the date of the penalty and the date of violation. This paper selects the penalty year instead of the inspection year.
### Table 9. Other robustness tests.

| Dep. Var.: Switch | (1) Exclude clients who have switch firms | (2) Exclude companies inspected by other bodies | (3) Exclude audit firms inspected by dispatched agencies |
|-------------------|------------------------------------------|-----------------------------------------------|--------------------------------------------------------|
| \( \Delta Q \)    | -0.670** (−2.14)                        | -1.031*** (−3.16)                            | -1.433*** (−3.28)                                      |
| \( \Delta Q \times \text{Check} \) | 1.140*** (3.82)                        | 1.438*** (3.43)                                | -1.291*** (3.35)                                       |
| \text{Check}       | 0.013 (0.76)                            | 0.002 (0.08)                                  | -0.024 (−1.12)                                        |
| Controls           | Included Client, Year, Audit Firm       | Included Client, Year, Audit Firm             | Included Client, Year, Audit Firm                     |
| Fixed Effects      |                                          |                                               |                                                        |
| Adj. R\(^2\)       | 30.4%                                   | 31.0%                                         | 32.1%                                                  |
| Observations       | 4426                                    | 4426                                          | 3718                                                   |

### Table 10. When do random inspections work: introduced or implemented?

| Dep. Var.: Switch | (1) Check the effect of random inspection by dispatched agencies | (2) Regression using the Logit model | (3) Control for possible omitted variables |
|-------------------|---------------------------------------------------------------|-------------------------------------|------------------------------------------|
| \( \Delta Q \)    | -0.541*** (−2.90)                                            | -4.512*** (−4.81)                  | -0.778*** (−4.25)                         |
| \( \Delta Q \times \text{Check} \) | 0.550 (1.02)                                             | 7.264*** (3.00)                    | 0.661*** (2.83)                           |
| \text{Check}       | -0.069** (−2.30)                                            | 0.550** (2.49)                     | −0.003 (−0.23)                            |
| New variables     |                                                              |                                     |                                          |
| \( \Delta Q \times \text{New variables} \) |                                         |                                     |                                          |
| Controls           | Included Client, Year, Audit Firm | Included Industry, Year, Audit Firm | Included Industry, Year                  |
| Fixed Effects      | Industry, Year                                              | Industry, Year, Audit Firm         | Client, Year, Audit Firm                 |
| Adj./Pseudo R\(^2\) | 27.5%                                                   | 12.6%                             | 2.9%                                      |
| Observations       | 3219                                                     | 4634                              | 4634                                     |

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### Table 9. Other robustness tests.

| Dep. Var.: Switch | (1) | (2) | (3) |
|-------------------|-----|-----|-----|
| \( \Delta Q \)    | -2.142*** (−4.54) | -2.053*** (−5.05) | -1.620*** (−2.79) |
| \( \Delta Q \times \text{Check} \) | 0.040 (0.25) | 0.004 (0.02) | -0.012 (−0.52) |
| Control Variables  | Included Industry, Year | Included Industry, Year, Audit Firm | Included Client, Year, Audit Firm |
| Fixed Effects      | Industry, Year | Industry, Year, Audit Firm | Client, Year, Audit Firm |
| Adj. R\(^2\)       | 5.4% | 11.4% | 12.7% |
| Observations       | 15,778 | 15,778 | 15,778 |

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### Table 10. When do random inspections work: introduced or implemented?

| Dep. Var.: Switch | (1) | (2) | (3) |
|-------------------|-----|-----|-----|
| \( \Delta Q \)    | -0.934** (−2.39) | -0.962** (−2.61) | -1.656*** (−4.56) |
| \( \Delta Q \times \text{Check} \) | 0.765* (1.84) | 0.926*** (2.77) | 1.543*** (2.91) |
| Check             | -0.019 (−0.86) | -0.009 (−0.28) | −0.063** (−2.33) |
| Control Variables  | Included Industry, Year | Included Industry, Year, Audit Firm | Included Client, Year, Audit Firm |
| Fixed Effects      | Industry, Year | Industry, Year, Audit Firm | Client, Year, Audit Firm |
| Adj. R\(^2\)       | 3.3% | 8.5% | 33.1% |
| Observations       | 2172 | 2172 | 2172 |
Fourthly, the logistic model was used to test the robustness. In Columns (9) and (10) of Table 9, we re-run the regression with the logistic model (controlling for industry, year, and firm fixed effects), and our conclusions remain robust.

Fifthly, we control for possible omitted variables, such as financial restatement, analyst tracking, supply chain concentration, and equity pledge by controlling shareholders (Cao & Li, 2019; Li & Zhao, 2014; Xue et al., 2018; Zhai et al., 2016). It can be seen that the results are still robust from Columns (11) and (12) of Table 9.

Finally, the placebo test. We randomly assign the audit firms to be spot-checked for three random inspection events from 2016 to 2018, and re-run the basic regression model, then repeat the process of random assignment 100 times. The results still support our conclusion.5

4.7. When will the random inspection policy work: introduced or implemented?

We discuss the time when the random inspection policy works. The random inspection policy was introduced in the second half of 2015 and began to be implemented in the first half of 2016. The time interval is not long, and it is easy to confuse the role of the introduction and implementation of the policy. Moreover, it is helpful to evaluate and improve the policy by examining the time point of action.

First, we construct a dummy variable Post. For 2016–2018 after the introduction of the policy, Post takes the value of 1, and for 2013–2015 before the introduction, the value of Post is 0. Subsequently, the variable Post was added to the model (2) after interacting with $\Delta Q$, and the regression results are reported in column A of Table 10. The results show that the introduction of the policy does not have a significant impact on opinion shopping. This may be because the rectification of problems requires a price, especially for difficult and costly problems (such as the distribution of interests between the head office and the branch office, the launch of new systems and staffing, etc.). So the audit firms have a fluke mentality and fail to respond immediately.

Secondly, we exclude the random inspection events in 2016, which were close to the introduction of the policy, and separately examine the impact of the implementation of the random inspections in 2017 and 2018 on opinion shopping. From column B of table 11, it can be seen that the coefficient of $\Delta Q$ is significantly negative, whereas the estimated coefficient of the interaction term $\Delta Q \times Post$ is significantly positive. The results mean that the random inspections in 2017 and 2018 played a role in discouraging audit opinion shopping. To sum up, it is the implementation of the random inspection policy, not the introduction, that alleviates the phenomenon of audit opinion buying.

5. Conclusion

This paper takes the random inspections conducted by the CSRC on audit firms from 2016 to 2018 as an opportunity to study the impact of this new regulatory measure on opinion shopping behaviour. The study finds that after the audit firm is randomly inspected, the possibility of the firm engaging in audit opinion shopping would be reduced. This conclusion remains unchanged after controlling for the firm- and client-level fixed effects.

5Results are kept for request.
Further researches find that this phenomenon is even more pronounced if the inspected audit firms are punished, or in engagements that are practiced by the non-Big 10 audit firms. After the dynamic analysis and the replacement of the opinion shopping model, the conclusion is still robust. Based on the integrated management and internal control, which are the focus of random inspection, we conduct mechanism tests and find that the effect of the random inspections is more significant in the practice by branch audit offices and in audit firms with a larger workload. In addition, it is the implementation of the random inspection policy, rather than its introduction, has played a role in restraining audit opinion shopping.

The conclusions of this paper have practical significance. First, this paper takes the random inspection policy of audit firms introduced by the CSRC in 2015 as a scenario. The research confirms the role of audit supervision in improving the effectiveness of independent audits and reducing opinion shopping. Enhanced audit oversight provides evidence support. Taking the random inspection policy of audit firms issued by CSRC in 2015 as the scene, this paper studies and confirms the role of audit supervision in improving the effectiveness of independent audits and reducing opinion shopping, and provides supporting evidence for regulatory agencies to strengthen audit supervision. Especially in the context of the reform of the registration-based IPO system, regulators should tighten the audit firm’s responsibility for authentication of corporate financial information, and strengthen the administrative supervision and industry self-discipline of firms, to ensure the orderly operation of the registration-based IPO system. Second, this paper confirms the implementation effect of the random inspection policy, but at the same time, it also finds that the introduction of this policy does not have the expected deterrent effect. This is not entirely consistent with the original intent of the policy. An effective regulatory policy should not only ensure the effectiveness of policy implementation, but also convey policy orientation, and change market expectations and the behaviour of regulated entities. We believe that in the process of formulating policies, regulators should clarify the details of supervision, reasonably weigh the compliance costs of the regulation, and avoid excessive compliance costs that lead to flukes. What’s more, adequate publicity and guidance should be carried out to achieve the expected policy effect. In addition, although the conclusions of this paper confirm that the three random inspection events from 2016 to 2018 played a role in reducing opinion shopping, the regulatory effect of this policy may change over time, which remains to be further studied.

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References

Aobdia, D., & Shroff, N. (2017). Regulatory oversight and auditor market share. *Journal of Accounting and Economics*, 63(2–3), 262–287. https://doi.org/10.1016/j.jacceco.2017.03.001

Cao, F., & Li, K. (2019). Controlling shareholder equity pledge and audit opinion purchase of listed companies. *Audit Research*, 2, 108–118. in Chinese. doi: CNKI:SUN:SYJY.0.2019-02-016

Carcello, J.V., & Neal, T.L. (2003). Audit committee characteristics and auditor dismissals following “new” going-concern reports. *The Accounting Review*, 78(1), 95–117. https://doi.org/10.2308/accr.2003.78.1.95

Carey, P., & Simnett, R. (2006). Audit partner tenure and audit quality. *The Accounting Review*, 81(3), 653–676. https://doi.org/10.2308/accr.2006.81.3.653

Chan, K.H., Lin, K.Z., & Mo, P.L.L. (2006). A political–economic analysis of auditor reporting and auditor switches. *Review of Accounting Studies*, 11(1), 21–48. https://doi.org/10.1017/s11142-006-6394-z

Chen, G.Z. (2020). Related party transactions and opinion shopping. *Journal of Applied Finance and Banking*, 10(1), 173–202. https://ideas.repec.org/a/sptfb/v10y2020i1f10_1_9.html

Chen, S.S., & Cao, Y.Y. (2018). Audit opinion purchase under equity incentive. *Auditing Research*, 1, 59–67. in Chinese. doi: CNKI:SUN:SYJY.0.2018-01-012

Chen, F., Peng, S., Xue, S., Yang, Z., & Ye, F. (2016). Do audit clients successfully engage in opinion shopping? Partner-level evidence. *Journal of Accounting Research*, 54(1), 79–112. https://doi.org/10.1111/1475-679X.12097

Chen, S., Sun, S.Y., & Wu, D. (2010). Client importance, institutional improvements, and audit quality in China: An office and individual auditor level analysis. *The Accounting Review*, 85(1), 127–158. https://doi.org/10.2308/accr.2010.85.1.127

Chi, H.Y., & Chin, C.L. (2011). Firm versus partner measures of auditor industry expertise and effects on auditor quality. *Auditing: A Journal of Practice & Theory*, 30(2), 201–229. https://doi.org/10.2308/ajpt-50004

Choi, J.H., Kim, J.B., Liu, X., & Simunic, D.A. (2008). Audit pricing, legal liability regimes, and Big 4 premiums: Theory and cross-country evidence. *Contemporary Accounting Research*, 25(1), 55–99. https://doi.org/10.1506/car.25.1.2

Chung, H., Sonu, C.H., Zang, Y., & Choi, J.H. (2019). Opinion shopping to avoid a going concern audit opinion and subsequent audit quality. *Auditing: A Journal of Practice & Theory*, 38(2), 101–123. https://doi.org/10.2308/ajpt-52154

DeFond, M.L. (2010). How should the auditors be audited? Comparing the PCAOB inspections with the AICPA peer reviews. *Journal of Accounting and Economics*, 49(1–2), 104–108. https://doi.org/10.1016/j.jacceco.2009.04.003

DeFond, M.L., & Lennox, C.S. (2011). The effect of SOX on small auditor exits and audit quality. *Journal of Accounting and Economics*, 52(1), 21–40. https://doi.org/10.1016/j.jacceco.2011.03.002

DeFond, M.L., & Lennox, C.S. (2017). Do PCAOB inspections improve the quality of internal control audits? *Journal of Accounting Research*, 55(3), 591–627. https://doi.org/10.1111/1475-679X.12151

DeFond, M., & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting and Economics*, 58(2–3), 275–326. https://doi.org/10.1016/j.jacceco.2014.09.002

Dye, R.A. (1991). Informationally motivated auditor replacement. *Journal of Accounting and Economics*, 14(4), 347–374. https://doi.org/10.1016/0165-4101(91)90008-C

Ehlen, C.R., & Welker, R.B. (1996). Procedural fairness in the peer and quality review programs. *Auditing: A Journal of Practice & Theory*, 15(1), 38–52.

Fang, J.X. (2011). A study on the effectiveness of reputation mechanism in transitional economy: Evidence from China’s audit market. *Financial Research*, 12, 16–26+38. in Chinese. https://doi.org/10.16538/j.cnki.jfe.201112.012.
Francis, J.R. (2011). A framework for understanding and researching audit quality. Auditing: A Journal of Practice & Theory, 30(2), 125–152. https://doi.org/10.2308/ajpt-50006

Gamlng, A.A., Krishnan, J., & Zhang, Y. (2011). Are PCAOB-identified audit deficiencies associated with a change in reporting decisions of triennially inspected audit firms? Auditing: A Journal of Practice & Theory, 30(3), 59–79. https://doi.org/10.2308/ajpt-10048

Grant, J., Bricker, R., & Shiptsova, R. (1996). Audit quality and professional self-regulation: A social dilemma perspective and laboratory investigation. Auditing: A Journal of Practice & Theory, 15(1), 142–150,153–156.

Gul, F.A., Wu, D., & Yang, Z. (2013). Do individual auditors affect audit quality? Evidence from archival data. The Accounting Review, 88(6), 1993–2023. https://doi.org/10.2308/accr-50536

Hanlon, M., & Shroff, N. 2022. Insights into auditor public oversight boards: Whether, how, and why they ‘work’. Journal of Accounting and Economics, 74(1), 101497. http://dx.doi.org/10.2139/accr-50536

Kim, Y., Li, H., & Li, S. (2014). CEO equity incentives and audit fees. Contemporary Accounting Research, 32(2), 602–638. https://doi.org/10.1111/1911-3846.12096

Krishnan, J., & Stephens, R.G. (1995). Evidence on opinion shopping from audit opinion conservatism. Journal of Accounting and Public Policy, 14(3), 179–201. https://doi.org/10.1016/0278-4254(95)00020-F

Lennox, C. (2000). Do companies successfully engage in opinion-shopping? Evidence from the UK. Journal of Accounting and Economics, 29(3), 321–337. https://doi.org/10.1016/S0165-4101(00)00025-2

Li, X.H., Cao, Q., & Sun, L.Y. (2016). Audit reputation damage and changes in client portfolio—— based on empirical evidence of administrative penalties by china securities regulatory commission from 1999 to 2014. Accounting Research, 4, 85–91+96. in Chinese. doi: CNKI: SUN:KJYJ.0.2016-04-012

Liu, W.J. (2016). Does the practice quality inspection of accounting firms improve audit quality? Auditing Research, 6, 98–104. in Chinese. doi: CNKI:SUN:SYJZ.0.2016-06-015

Liu, Q.L., Guo, J.X., & Tang, Y.Y. (2015). Organizational form, legal responsibility and audit quality of accounting firms: A study based on the individual level of signing auditors. Accounting Research, 4, 86–94+96. in Chinese. doi: CNKI: SUN:KJYJ.0.2015-04-012

Liu, X.X., & Li, M.H. (2013). Can administrative penalties improve audit quality?——Based on the experience research of china securities regulatory commission’s administrative penalty cases from 2008 to 2010. Securities Market Herald, 6, 27–32+42. in Chinese. doi: CNKI: SUN:ZQDB.0.2013-06-006

Liu, X.J., & Wang, K.T. (2014). Does the transformation of accounting firms affect audit quality? Accounting Research, 4, 88–94+96. in Chinese. doi: CNKI:SUN:KJYJ.0.2014-04-012

Li, Q.Y., & Zhao, Y.B. (2014). An empirical study on the purchase of audit opinions after corporate financial restatement. Auditing Research, 5, 101–107. in Chinese. doi: CNKI:SUN:SYJZ.0.2014-05-016

McCabe, R.K., Luzi, A.D., & Brennan, T. (1993). Managing partners’ perceptions of peer review. Auditing: A Journal of Practice & Theory, 12(2), 108–115.

Newton, N.J., Persellin, J.S., Wang, D., & Wilkins, M.S. (2016). Internal control opinion shopping and audit market competition. The Accounting Review, 91(2), 603–623. https://doi.org/10.2308/accr-51149

Polk, C., & Sapienza, P. (2008). The stock market and corporate investment: A test of catering theory. The Review of Financial Studies, 22(1), 187–217. https://doi.org/10.1093/rfs/hhn030

Simon, D.T., & Francis, J.R. (1988). The effects of auditor change on audit fees: Tests of price cutting and price recovery. The Accounting Review, 63(2), 255–269. https://www.jstor.org/stable/248104

Tang, Y.J. (2007). Audit fees, audit committees and opinion buying: Evidence from Chinese listed companies in 2004-2005. Financial Research, 4, 114–128. in Chinese. doi: CNKI:SUN:JRYJ.0.2007-04-011

Wang, B., Li, J., Su, W.B., & Tang, Y.F. (2011). Can administrative penalties improve audit quality?—— Based on the evidence of China securities regulatory commission penalties. Accounting Research, 12, 86–92. in Chinese. doi: CNKI: SUN:KJYJ.0.2011-12-015
Westermann, K.D., Cohen, J., & Trompeter, G. (2019). PCAOB inspections: Public accounting firms on "trial". Contemporary Accounting Research, 36(2), 694–731. https://doi.org/10.1111/1911-3846.12454

Wu, L.S. (2005). Audit opinion buying: Behavioral characteristics and supervisory strategies. Economic Research, 7, 66–76. in Chinese. doi: CNKI:SUN:JJYJ.0.2005-07-006

Wu, L.S., & Tan, L. (2005). Auditor’s change decision and audit opinion improvement. Audit Research, 2, 34–40. in Chinese. doi: CNKI:SUN:SJYZ.0.2005-02-005

Wu, L.N., Wang, C.F., & Lu, Z.F. (2013). Auditor change and audit opinion purchase in enterprise groups. Auditing Research, 1, 70–78. in Chinese. doi: CNKI:SUN:SJYZ.0.2013-01-016

Wu, X., Yang, Y.L., & Zhang, J.S. (2014). Is preventive supervision accompanied by stricter audit results?——Evidence from AICPA annual report audit risk interview. Auditing Research, 4, 63–71. in Chinese.

Xia, W.X., & Chen, H.W. (2006). Auditor change, audit fees and audit committee efficiency. Accounting Communications (Academic Edition), 2, 3–9+13. in Chinese. doi: CNKI:SUN:CKTS.0.2006-02-000

Xie, Y.H., Liu, W.J., & Shi, D.J. (2018). A study on the purchase behavior of audit opinion before the implementation of equity incentive. Financial Research, 11, 33–46. in Chinese. doi: 10.16538/j.cnki.jfe.2018.11.003

Xue, S., Yao, Y.F., & Wang, X.F. (2018). Supply chain concentration and audit opinion buying. Accounting Research, 8, 57–64. in Chinese. doi: CNKI:SUN:KJYJ.0.2018-08-008

Yao, Y.F. (2018). News media reports and internal control opinion buying. Audit Research, 4, 111–119. in Chinese. doi: CNKI:SUN:SJYZ.0.2018-04-017

Zhai, S.B., Zhang, W., Cao, Y., & Piao, R.Y. (2016). Analyst tracking and audit opinion buying. Accounting Research, 6, 86–93+95. in Chinese. doi: CNKI:SUN:KJYJ.0.2016-06-012

Zhang, J.S., Tang, X.J., & Li, G.Z. (2018). Can preventive regulation curb the risk of stock price crash?——A study based on the inquiry letter of the annual report of the stock exchange. Journal of Management Science, 2110, 112–126. in Chinese. doi: CNKI:SUN:JCYJ.0.2018-10-009
### Table A1. Variable definitions.

| Variables  | Definitions                                                                 |
|------------|-----------------------------------------------------------------------------|
| Switch ($S$) | A dummy variable that equals 1 if a firm is audited by a new audit firm in year $t$, and 0 otherwise |
| Check      | A dummy variable that equals 1 for the firms under random inspection in the year after inspection, and 0 otherwise |
| $Q_{it}$   | A dummy variable that equals 1 if firm $i$ receives a modified audit opinion in year $t$, and 0 otherwise |
| $Q_{it-1}$ | A dummy variable that equals 1 if firm $i$ receives a modified audit opinion in year $t-1$, and 0 otherwise |
| Size       | The logarithm of the total assets of the enterprise                         |
| Age        | The logarithm of the number of years since its establishment                |
| Lev        | Total Liabilities/Total Assets                                              |
| ROC        | EBIT/(net current liabilities + net non-current liabilities – intangible assets – deferred tax assets) |
| CF         | Net cash flow from operating activities/total assets                        |
| DIRS       | The shareholding ratio of executives                                      |
| LARS       | Total shares held by non-executives with a shareholding ratio of more than 5% |
| Big10      | A dummy variable that equals 1 if a firm is in the top 10 audit firm        |