



# Staying or switching: How companies react to audit firm penalties

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## ABSTRACT

We investigate the relationship between corporate governance characteristics and the change of penalized audit firms based on financing, reputation, and client relationship perspectives. Based on a sample of client companies of penalized audit firms in China between 2008 and 2023, we find that companies with financing incentives and good reputations tend to change penalized audit firms, while companies with close “audit firm-client” relationships tend to maintain cooperation. The above conclusion still stands after a series of endogeneity and robustness tests. Heterogeneity tests indicate that the intensity of the China Securities Regulatory Commission (CSRC)’s penalties, the company’s level of real earnings management, and the nature of property rights all affect the company’s decision to change the penalized audit firm. Further research finds that the company’s continued cooperation with the penalized audit firm can harm its accounting information quality and accounting conservatism. The findings of our study enrich the existing research on the factors influencing the change of penalized audit firms in emerging markets.

## 1. Introduction

The core function of auditing is to provide independent assurance of the truthfulness and accuracy of financial information, thereby acting as a guarantor in the capital market. Audit firms, as independent auditors, not only safeguard the rights and interests of investors but also enhance market confidence by improving the transparency and credibility of corporate disclosures. In recent years, a series of major financial fraud cases have emerged in China’s capital market, such as \*ST Kangde (KDX, 002450.SZ) and \*ST Furen (600781.SH), which have seriously damaged the reputation of well-known auditing firms.<sup>1</sup> These events have not only raised questions about the audit reports issued by these firms, but also triggered widespread client attrition, enhancing prior findings that auditor reputation loss significantly weakens client retention (Krishnamurthy et al., 2006).

From an internal operating perspective, financing is crucial for the survival and development of companies. In an environment characterized by information asymmetry, companies with financing needs may choose to terminate their relationship with a penalized audit firm and instead engage an unpenalized one, signaling high-quality financial reporting to the capital market. Similarly, corporate reputation is one of the most important intangible assets a firm possesses (Hall, 1993), helping build stakeholder trust and achieve superior returns. Therefore, highly reputable companies may be more inclined to sever ties with penalized auditors to preserve the

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<sup>1</sup> \*ST (Star Special Treatment): Representing a more critical status than ‘ST’, the “\*ST” designation is conferred upon companies grappling not only with financial distress but also confronting additional complications such as regulatory non-compliance or governance issues. This marker serves as an indicator of the potential risk of the company being delisted from the stock exchange.

long-term value of their reputational assets (Harrison et al., 2018).

From the perspective of external relationships, the deepening personal ties between signing auditors and client companies represent investments in relationship-specific signaling channels (Chen et al., 2019b). In cases where the value of these channels is high, companies may choose to maintain their relationship with a penalized auditor, tolerating negative market signals in exchange for the benefits of these established communication mechanisms.

However, existing studies have yet to examine the intrinsic motivations that drive companies to switch away from penalized auditors, specifically in relation to reputational concerns, financing needs, and relationship maintenance. Thus, it is valuable to explore why companies voluntarily choose to replace penalized auditors.

Compared to developed economies, China's audit market exhibits several distinctive characteristics that may shape client decision-making following auditor sanctions. First, the market is highly decentralized. Unlike the U.S., where the Big 4 dominate the audit landscape, China's audit market comprises a diverse set of small and medium-sized local audit firms, and the Big 4's market share is well below the global average. This decentralized structure affords Chinese companies greater flexibility in auditor selection and rotation.

Second, the demand for high-quality audits in China is relatively weak, especially when compared to developed markets. While hiring reputable audit firms (such as the Big 4) is often viewed in developed economies as a credibility signal and a mechanism to reduce information asymmetry (Bleibtreu & Stefani, 2018), Chinese companies frequently prioritize audit fee savings and long-term auditor relationships. In such a context, even when an audit firm is penalized, many companies may choose to retain the auditor rather than bear the costs and operational disruptions associated with switching.

Third, and most importantly, China's institutional environment is marked by low litigation risk and regulatory enforcement that is administrative rather than market driven (Ge et al., 2025; Yang et al., 2024, 2025). Audit firm penalties are typically issued by the China Securities Regulatory Commission (CSRC) as administrative sanctions, with limited legal consequences and rare license revocation. Unlike high-enforcement jurisdictions, these penalties rarely lead to mass client departures. Instead, they leave companies with significant discretion to maintain existing auditor relationships despite reputational concerns. As a result, China provides a compelling context in which to examine how companies respond to auditor sanctions in environments where market-based and legal enforcement mechanisms are weak or absent.

Based on an empirical analysis of audit firms penalized by the CSRC between 2008 and 2023, we draw several key conclusions. First, we find that 89 % of Chinese listed companies chose to continue working with the penalized audit firm, despite the firm being sanctioned for fraudulent or negligent behavior. This finding contrasts with patterns observed in developed markets, where clients typically switch auditors swiftly to protect their reputations and uphold the credibility of financial reporting. In China, however, companies exhibit a relatively low propensity to change auditors, suggesting that audit quality exerts a weaker influence on company behavior in a government-led regulatory environment with low litigation risk.

Second, we find that companies' financing needs and reputational considerations significantly affect their likelihood of auditor replacement. Companies with strong external financing demands and heightened sensitivity to reputational risks are more likely to terminate relationships with penalized auditors, maintaining credibility in the capital markets. While some companies have taken this step, most companies, particularly those with close or long-standing relationships with their auditors, choose to maintain their existing relationships.

Moreover, we find that several factors moderate the likelihood of auditor replacement. These include the nature of company ownership, managerial incentives related to surplus management, and the severity of regulatory penalties. For example, state-owned enterprises (SOEs) tend to retain penalized auditors. In contrast, non-state-owned enterprises (NPOEs) are more responsive to higher penalty intensities and more likely to change auditors under such conditions. Finally, the study shows that companies choosing to continue their cooperation with penalized firms experience a significant decline in accounting information quality and financial reporting robustness. This suggests that while retaining the same auditor may offer short-term operational continuity, it can compromise transparency and impair long-term reporting integrity.

Our study makes three contributions to the literature. First, while prior research has predominantly focused on the consequences of mandatory auditor replacement following regulatory shocks, such as the collapse of Arthur Andersen in the U.S. (e.g., Asthana et al., 2010; Bratten et al., 2019; Cameran et al., 2016; Chen and Zhou, 2007; Defond & Lennox, 2017), our study shifts the focus to voluntary auditor switching in an emerging market setting. Unlike those studies, where client behavior is largely shaped by external compulsion or legal mandates, we explore how companies respond when they retain full discretion over auditor choice, even after regulatory penalties. This enables us to examine the underlying motivations, such as reputational concern, financing pressure, and relational continuity, that drive decision-making in the absence of coercive forces. In contrast to prior studies conducted in low-litigation environments such as Japan (e.g., Skinner & Srinivasan, 2012), our setting features not only low litigation risk but also weak market-based disciplinary mechanisms. This enables us to observe client decisions in a context of minimal external pressure, offering a complementary perspective on the boundary conditions of auditor switching behavior.

Second, our findings provide new evidence on how companies perceive and respond to audit quality in emerging markets. In developed economies, high-quality audit services are often treated as a premium, associated with better transparency and stronger investor confidence (Chen et al., 2019a; Ellul et al., 2016; Francis, 2004; Lang et al., 2012). However, we find that despite penalties, most Chinese companies choose not to replace their auditors, suggesting that audit quality does not weigh heavily in their decision calculus. Instead, companies may prioritize cost savings or relationship continuity. This finding supports the notion that audit quality carries a lower market premium in emerging markets and illustrates how institutional characteristics, such as weak litigation risk and administrative regulation, shape the demand-side dynamics of audit quality.

Third, we contribute to the literature on auditor-client relationships by showing how long-term relational networks can persist even

after audit firm sanctions, and how these enduring ties may compromise audit effectiveness. Prior studies have largely focused on short-term responses to auditor misconduct (e.g., Hennes et al., 2014; Swanquist & Whited, 2015), often in high-enforcement contexts. In contrast, we find that client-auditor relationships in China exhibit strong path dependence, and that continued engagement with penalized auditors can undermine financial reporting quality and accounting conservatism. This highlights the long-term risks of relational stickiness in weakly regulated environments and offers a cautionary perspective on the limits of informal governance mechanisms in audit markets.

The remainder of this study proceeds as follows. Section 2 is the literature review and hypotheses development. Section 3 shows the research design, including sample selection, model establishment, and variable definitions. Section 4 reports descriptive statistics, correlation matrix, main regression results, endogeneity and robustness tests, heterogeneity tests, and inspection of the consequences. Section 5 concludes the study.

## 2. Literature review and hypotheses development

### 2.1. Literature review

Factors influencing the selection of audit firms include company-level characteristics such as the pursuit of favorable audit opinions, specific aspects of corporate governance, and the demand for high audit quality. Beyond internal factors, the choice is also shaped by the broader regulatory and operational context, including legal and regulatory frameworks, societal norms, and market structure dynamics. At the micro level, early research on auditor switching focused on whether companies aimed to secure favorable auditor opinions during the transition and how such behavior affected audit quality and pricing (Lennox, 2000). As the literature has developed alongside evolving corporate audit needs, researchers have increasingly examined how agency conflicts (Abbott et al., 2013), earnings management (Francis et al., 1999), corporate governance mechanisms (Carcello & Neal, 2003), board structures (Chang & Chen, 2020; Chen & Zhou, 2007), and financial restatements (Mande & Son, 2013; Romanus et al., 2008) influence decisions to change auditors.

Regarding the external environment, factors influencing auditor changes can be categorized into mandatory and voluntary drivers. Among mandatory factors, the U.S. Sarbanes-Oxley Act stipulates that the maximum tenure of an audit engagement partner serving a single client is five years. Reflecting this “five-year rotation”, the Chinese Ministry of Finance and the CSRC jointly issued guidelines limiting the continuous audit service period of certified public accountants for post-IPO companies to two years.<sup>2</sup> On the voluntary side, enhanced regulatory oversight and improvements in the execution environment increase companies’ demand for high-quality audits, thereby encouraging them to proactively change auditors (Brocard et al., 2018; Chan et al., 2006). In the context of audit market structure and client liquidity, Van Raak et al. (2020) find that higher market concentration reduces the likelihood of auditor switching. Moreover, governments can influence auditor choice by intervening in the supply and demand dynamics of the audit market (Aghion et al., 2010). This is particularly in regions with underdeveloped contractual institutions, where government intervention may disrupt the equilibrium between listed companies and their external auditing environment.

Research on the repercussions of administrative sanctions imposed on audit firms can be grouped into three key areas: (1) the direct consequences for penalized audit firms, (2) the relationship between these sanctions and subsequent audit quality, and (3) the impact on the clients of penalized audit firms. Many studies have shown that audit firms suffer significant losses following regulatory penalties. Negative assessments by the audit market and media often lead to a substantial decline in market share, weakened client retention, and diminished capacity to attract new clients (Skinner & Srinivasan, 2012). In addition, penalized audit firms tend to reduce audit fees for existing clients as a retention strategy (Firth, 1990).

In terms of audit quality, sanctions send a negative signal to the market regarding the company’s audit reliability (Lennox & Pittman, 2010). Azzali et al. (2021) find that disclosure of such sanctions leads to perceptions of lower information quality, prompting clients to switch to high-quality offices. However, some penalized audit firms attempt to restore their reputations by improving audit quality and issuing more nonstandard opinions for high-risk clients (Firth et al., 2014).

Regarding client impact, diminished trust in a penalized audit firm increases the likelihood that associated companies will receive unfavorable peer reviews and inspection outcomes from regulatory bodies such as the Accounting Supervision Committee (Abbott et al., 2013; Hilary & Lennox, 2005). These developments often result in a decline in the clients’ share prices (Weber et al., 2008), increased capital costs, reduced credibility of financial statements, thereby causing broader financial and reputational losses (Chaney & Philipich, 2002; Dechow et al., 2011).

Existing studies primarily examine auditors switching in response to traditional factors, focusing on micro-level firm characteristics and differences in the external contractual environment. However, relatively little research has explored the distinct dynamics that influence client switching behavior following the penalization of audit firms. The current literature has addressed auditor changes after disciplinary actions primarily through the lenses of agency conflict and board quality. The potential impact of companies’ internal business motivations and external relationship networks on such decisions remains underexplored.

The aggravation in the credibility and reliability of a penalized audit firm can significantly undermine investor confidence and negatively affect the stock price performance of its clients. This reputational spillover effect may prompt auditor switching, particularly among companies with strong financing needs or a high public profile. However, for companies engaged in long-term

<sup>2</sup> From the fifth provision of the SFC’s Document (2003) No.13: Signatory CPAs providing audit services for initial public offering companies shall not provide audit services for a period of more than two consecutive full fiscal years after the listing of the company.

relationships with penalized auditors, sunk costs, such as prior audit support investments and strong personal ties with individual auditors, may weaken the company's willingness to switch, resulting in continued cooperation despite reputational risks.

Using the exogenous shock of audit firm penalties as a starting point, our study investigates how company-level characteristics influence auditor switching decisions. It contributes to the literature by providing a deeper understanding of the consequences of auditor punishment, especially within the institutional context of China's regulatory and market environment.

## 2.2. Hypothesis development

According to signaling theory, companies communicate their financial health and corporate governance quality to external stakeholders through observable actions, one of which is the selection of an audit firm (Lennox & Pittman, 2011; Morris, 1987). In an environment characterized by information asymmetry, particularly when an audit firm has been penalized for non-compliance, a company's decision to either retain or terminate the relationship with the penalized auditor becomes a critical signal of its integrity, transparency, and commitment to high-quality financial reporting.

Companies' signaling strategies are shaped by varying motivations, such as financing needs, reputational considerations, and long-term relationships with auditors. In the following sections, we develop hypotheses along three dimensions, including financing motives, corporate reputation, and auditor-client relationships, to explore how these factors influence companies' decisions when faced with the penalties imposed on their audit firms.

### 2.2.1. Financing motives and the change of penalized audit firm

China's audit firm information disclosure system remains in a formative and exploratory stage. According to signaling theory, when the intrinsic quality of services is difficult to observe, market participants rely on observable signals to make informed judgments (Spence, 1973). In the context of auditing, the reputation and regulatory history of audit firms serve as proxies for audit quality and the reliability of financial reporting (Barton, 2005). Thus, an audit firm's perceived quality functions as a credible signal of the company's overall information environment, thereby significantly influencing its financing performance (Azzali et al., 2021).

When a company continues to engage a penalized audit firm, this decision undermines its ability to signal high-quality financial reporting to external stakeholders. The association with a sanctioned auditor increases information asymmetry with investors, raising concerns about adverse selection and moral hazard (Jensen & Meckling, 1976; Watts & Zimmerman, 1983). As a result, investors may demand higher risk premiums or impose transaction costs. To mitigate these effects, rational companies are incentivized to terminate relationships with auditors whose reputational signals have been compromised and to select unpenalized audit firms instead. This switch conveys a positive signal to the market, enhancing perceptions of financial reporting quality and reducing information asymmetry between management and external financiers (DeFond, 1992). These signaling effects positively impact investor confidence, potentially increase market valuations and ultimately reduce financing costs (Francis & Wang, 2008).

From a regulatory perspective, unpenalized audit firms provide stronger signaling value regarding audit quality and institutional credibility. The CSRC's differential treatment of audit firms based on their reputation creates additional signaling effects. Companies with active financing needs are particularly responsive to such regulatory attitudes and market signals.<sup>3</sup> To align with regulatory preferences and optimize their quality signals, companies seeking financing will actively avoid audit firms that send negative signals to regulators (Ettredge et al., 2011; Tate, 2007).

Based on the above analysis, our study argues that companies with financing incentives are more likely to manage market perceptions by disengaging penalized audit firms to enhance their credibility and financing prospects. Accordingly, we propose the following hypothesis:

**H1.** Companies with financing incentives are more inclined to change their relationship with penalized audit firms.

### 2.2.2. Corporate reputation and change of penalized audit firm

Corporate reputation is widely regarded as one of a company's most valuable intangible assets (Hall, 1993), serving as a strategic signal that enhances stakeholder trust and supports the generation of superior returns. According to audit insurance theory and deep pocket theory, the selection of an audit firm serves as a public indication of a company's financial integrity and risk management philosophy. Accordingly, the signaling value of corporate reputation is closely linked to the reputation of the company's external auditor (McWilliams et al., 2006).

Drawing from the effective contract theory of reputation, corporate reputation acts as a trust-based signal to external stakeholders due to its exclusivity and inimitability. When an audit firm is sanctioned, the resulting negative signal can spill over to its clients, contaminating their reputational capital. Hecker et al. (2006) demonstrate that such penalties significantly reduce investor perceptions of both the audit firm's trustworthiness and the financial reporting credibility of its clients, highlighting the reputational interdependence between auditors and their clients.

Maintaining a relationship with a penalized auditor sends conflicting signals to the market, potentially undermining a company's carefully cultivated reputation. To preserve the consistency and clarity of their quality signals, highly reputable firms are more likely to

<sup>3</sup> After an audit firm is punished by the CSRC, other IPO and financing businesses for which it is responsible will be subject to stricter scrutiny and may even be terminated. Available at: <http://www.stcn.com/article/detail/1338863.html>. and <https://finance.eastmoney.com/a/202408243164415549.html>.

sever ties with penalized auditors. Engaging a reputable, unpenalized audit firm helps reinforce a company's commitment to high-quality financial reporting and supports the preservation of a favorable market image.

Furthermore, under the reputation maintenance effect (Harrison et al., 2018), high-reputation companies invest more resources in building and preserving the signaling value of their reputation compared to low-reputation companies. These companies face heightened market scrutiny, creating a dual mechanism of internal investment in signal maintenance and external signal verification through market monitoring. Maintaining a credible reputational signal not only mitigates the risk of market sanctions but also enables companies to earn "reputation rent" (excess returns derived from sustained reputational advantages). This dynamic explains why companies with stronger reputations are more inclined to dissociate from auditors whose reputations have been damaged to safeguard their long-term reputation value. Therefore, the following hypothesis is proposed:

**H2.** Companies with higher reputations are more inclined to change their relationship with penalized audit firms.

### 2.2.3. Audit firm-client relationship and change of penalized audit firm

In the context of China's economy, social relationships serve as important informal institutions and signals of trust. As the duration of engagement between an audit firm and its client lengthens, the relationship evolves beyond a simple market transaction into a complex signaling game characterized by extensive negotiations, communications, and coordination (Fama & Jensen, 1983). Over time, this interaction creates relationship-specific signals that are difficult for external parties to observe or verify, potentially leading to a bilateral monopoly cooperation.

The development of such relationships requires substantial investment in both the production and interpretation of client-specific signals. Initially, companies must allocate resources to familiarize auditors with their operational structures, financial systems, and reporting practices, which contributes to high switching costs. As the relationship matures, additional costs arise from the auditor's continued efforts to interpret evolving firm-specific information, referred to as audit support costs (Chan & Wu, 2011; Chen et al., 2008). These relationship-specific investments in signal production and interpretation create barriers to auditor switching, conferring advantages to incumbent auditors.

Beyond these explicit costs, the growing private relationship between signing auditors and clients represents an investment in relationship-specific signaling channels. These private channels enhance signaling efficiency and reduce information asymmetry between the two parties. However, the information value embedded in such channels is often non-transferable and cannot be replicated by a new auditor (Knechel & Vanstraelen, 2007). A change in auditors would therefore result in the loss of these intangible yet valuable assets.

From a cost-benefit perspective, these relationship-specific investments act as soft constraints on auditor switching. When an audit firm is penalized, it sends a negative public signal to the market. However, companies must weigh this reputational risk against the loss of their embedded relationship-specific signaling mechanisms. In cases where the value of these channels is high, companies may choose to retain the penalized auditor, essentially trading off the negative market signal against the benefits of their established signaling mechanisms. By doing so, companies may signal confidence in the substance of their audit relationship despite the presence of regulatory sanctions. Therefore, we propose the following hypothesis:

**H3.** Companies with closer audit firm-client relationships are more inclined to maintain their relationship with penalized audit firms.

## 3. Research design

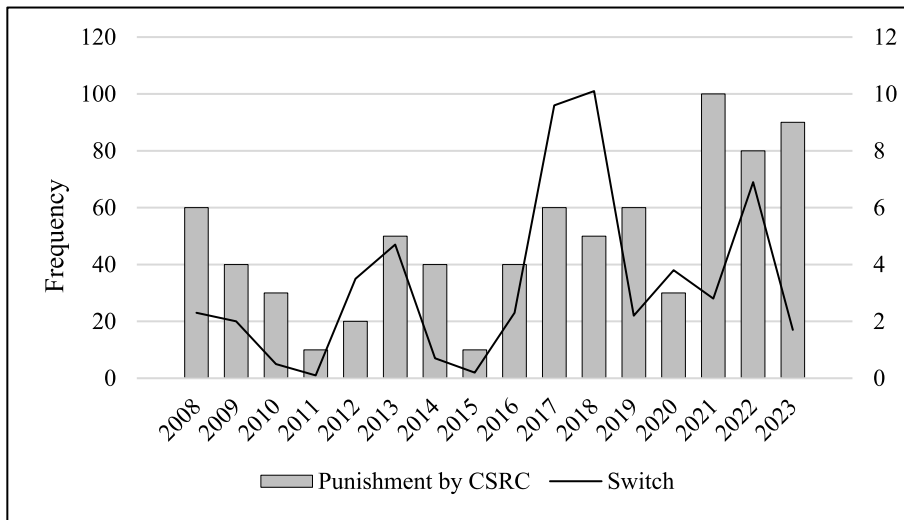
### 3.1. Sample selection

The implementation of new accounting standards in China began in 2007. To ensure comparability of data within the sample period, our study uses data on administrative punishment decisions made by the CSRC against audit firms and data on listed companies from 2008 to 2023. The study aims to determine whether the companies' financing motivations, corporate reputation, and the dynamics of the audit firm-client relationship are important governance factors that affect clients' changing of punished audit firms.

Through meticulous manual sorting, a total of 5368 initial samples were gathered. Subsequently, this number was refined down to 4945 useable samples after the exclusion of specific categories. These exclusions, conducted in sequence, involved the removal of initial public offering (IPO) samples, samples with change reasons of regular rotation and merger of audit firms, samples from the financial and insurance sectors, and instances of missing data from the current year's dataset. In this study, the industry classification standard of the CSRC in 2012 is taken as the sample industry classification standard. The financial data of listed companies was sourced primarily from the China Stock Market & Accounting Research (CSMAR) and the Wind databases. To address instances of missing data within these sources, a manual consultation of the annual reports of the respective companies was conducted. A manufacturing industry takes a 2-digit code, and a non-manufacturing industry is assigned a 1-digit code. All continuous variables are winsorized at the 1–99 % level before estimation, and the standard errors of the research model were all cluster processed at the company level.

Fig. 1 depicts the annual trend in the change of the frequency of administrative penalty decisions of the CSRC as well as the sample of companies that changed audit firms. The graphed trend in changes shows that the frequency of administrative penalties imposed by the CSRC on audit firms fluctuates periodically, with a change cycle every four to five years, reaching peaks in 2008, 2013, 2017, and 2021. The number of companies that changed audit firms also showed a trend of convergence. The administrative penalty imposed on the audit firm by the CSRC may be a significant reason for the listed company to change the penalized audit firm for one with an intact reputation.

Table 1 shows the frequency of administrative penalty decisions of the CSRC and the annual distribution of samples. From 2008 to



**Fig. 1.** Trend in Administrative Penalty Decisions and The Number of Companies That Changed Audit Firms. Note: This figure shows the time trends in the frequency of administrative penalty decisions and the number of companies that changed audit firms in the sample.

2016, 166 companies changed from penalized audit firms to new audit firms, and the number of companies that changed from penalized audit firms between 2017 and 2023 was 370, leading to an increase in the sample size in recent years, which is mainly due to the following two reasons. Firstly, the number of listed companies in China has been on the rise year by year, with a total of 3052 companies at the end of 2016 and 5346 companies in 2023, which leads to the increasing average client base of Chinese audit firms (including penalized audit firms). Secondly, the penalized audit firms in recent years, such as Lixin and Ruihua, have had a significant influence in the industry and own a larger client group, thus increasing the sample size.<sup>4</sup>

Our study further collected and manually categorized the reasons for changing audit firms as disclosed in the official announcements of companies transitioning from sanctioned audit firms to new ones. As illustrated in Fig. 2, excluding categories labeled as “other” and “not disclosed,” the three most cited reasons for changing audit firms were too long a service period of the predecessor (Reason ID = 8), contract expiration (Reason ID = 1), and business requirements (Reason ID = 4). This finding aligns with our earlier analysis that the decision to switch from penalized audit firms predominantly reflects voluntary action by the companies.

### 3.2. Empirical model and variables

Our study investigates financing motivation, corporate reputation, and audit firm-client relationship variables and their impact on leaving a penalized audit firm for a new firm. The OLS model requires the residuals to follow a normal distribution. However, when the dependent variable is a dummy variable, the residuals are two-point distributed, which violates the assumption of normal distribution. As the explanatory variable Switch is a dummy variable, referring to Matějka and McKay (2015), we use the non-linear logit model for empirical analysis. To verify our hypotheses, the following models are established:

$$\text{Logit}(\text{Switch}_{i,t}) = \alpha_0 + \alpha_1 \text{INJECT}_{i,t} + \alpha_n \text{Controls}_{i,t} + \text{Industry} + \text{Year} + \varepsilon_{i,t} \quad (1)$$

$$\text{Logit}(\text{Switch}_{i,t}) = \alpha_0 + \alpha_1 \text{REP}_{i,t} + \alpha_n \text{Controls}_{i,t} + \text{Industry} + \text{Year} + \varepsilon_{i,t} \quad (2)$$

$$\text{Logit}(\text{Switch}_{i,t}) = \alpha_0 + \alpha_1 \text{Tenure}_{i,t} + \alpha_n \text{Controls}_{i,t} + \text{Industry} + \text{Year} + \varepsilon_{i,t} \quad (3)$$

where the dependent variable is whether the company changes the penalized audit firm ( $\text{Switch}_{i,t}$ ). In this research, we manually compiled the administrative penalty decision letters available on the CSRC website. Based on an administrative penalty decision made by the CSRC against an audit firm in a particular year, we generated a list of client companies that were audited by these audit firms in the year preceding the punishment. Our analysis then tracked whether each client company transitioned to a new audit firm between the date of the original audit firm’s penalty and the publication date of the subsequent annual financial report. If the company selects a new audit firm to replace the penalized audit firm, the Switch value is one, otherwise zero.

$\text{INJECT}_{i,t}$ ,  $\text{REP}_{i,t}$ , and  $\text{Tenure}_{i,t}$  are independent variables representing financing motives, corporate reputation, and audit firm-client relationship, which are used to test hypotheses H1, H2, and H3, respectively. First, we utilize a straightforward and precise approach to

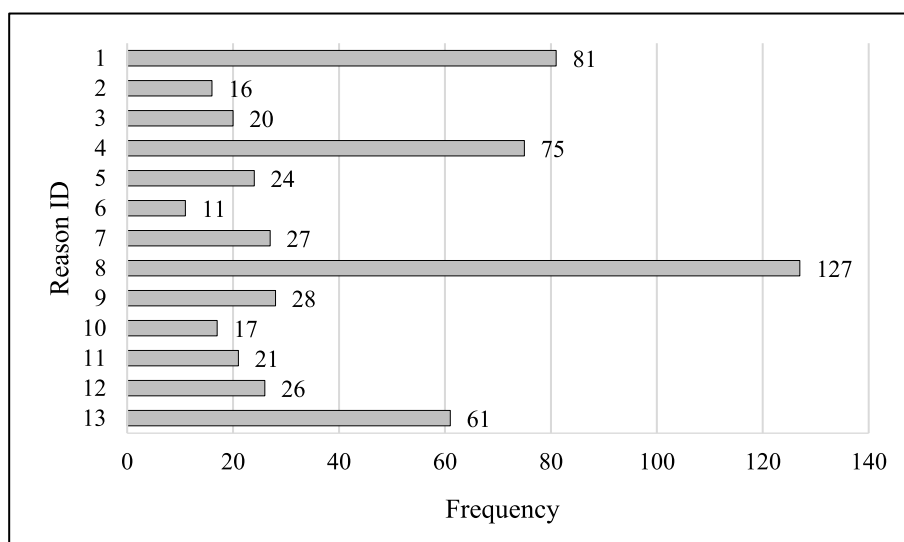
<sup>4</sup> Lixin: Lixin Certified Public Accountants, one of China’s oldest and most prominent accounting firms, known for providing audit and assurance services across various industries. Ruihua: Ruihua Certified Public Accountants, a leading Chinese accounting firm, previously one of the largest in China, offering audit, tax, and advisory services to domestic and international clients.

**Table 1**

Frequency of administrative penalty decisions and sample distribution.

Year	Switch = 0		Switch = 1		Penalty by CSRC
	Frequency	Proportion	Frequency	Proportion	Frequency
2008	85	80 %	21	20 %	106
2009	0	0 %	20	100 %	20
2010	86	95 %	5	5 %	91
2011	1	50 %	1	50 %	2
2012	15	28 %	38	72 %	53
2013	172	79 %	47	21 %	219
2014	37	84 %	7	16 %	44
2015	4	67 %	2	33 %	6
2016	349	94 %	23	6 %	372
2017	902	90 %	96	10 %	998
2018	948	90 %	101	10 %	1049
2019	252	92 %	22	8 %	274
2020	513	92 %	46	8 %	559
2021	102	78 %	28	22 %	130
2022	854	92 %	70	8 %	924
2023	91	93 %	7	7 %	98
Total	4411	89 %	534	11 %	4945

Note: This table shows the frequency and sample distribution of administrative penalty decisions between 2008 and 2023. Switch = 1 indicates that listed companies changed their auditing firms after being penalized, and Switch = 0 indicates that they did not change their auditing firms. “Frequency” refers to the number of companies that changed or did not change their auditing firms, and the number of auditing firms penalized by the CSRC.



**Fig. 2.** Description of reasons for the change of the audit firm. Note: The different Reason IDs represent the following reasons for the change of audit firm: 1.Expiry of contract; 2.Geographical reasons; 3.Public tender; 4.Business requirements; 5.Unified auditor; 6.Auditor resignation; 7.Asset restructuring; 8.Length of service of predecessor; 9.Arrangement by State-owned Assets Supervision and Administration Commission; 10.Change of management; 11.Decision by the board of directors; 12.Other reasons; 13.Not disclosed.

measure the financing motivation of companies based on whether a listed company announces a plan for refinancing in the subsequent year. Refinancing plans include public additional issuances and rights issues. If such a plan is issued, it indicates that the company possesses a financing motivation, denoted by assigning an *Inject* value of one. In the absence of a refinancing plan, the *Inject* value is zero.

Second, referring to existing studies (Haleblian et al., 2017), our study uses the positive media attention of companies to measure

corporate reputation.<sup>5</sup> We use newspaper reports and online reports included in the CNRDS database as the data source, and first retrieve the news topics one by one according to the abbreviations and full names of listed companies to count the number of positive news reports of listed companies and measure corporate reputation by the natural logarithmic value of adding 1 to the number of positive news reports of listed companies.

Finally, we follow Callen and Fang (2017) to employ the number of consecutive years a company has engaged with its current audit firm as a metric to quantify the closeness of the relationship between the audit firm and its client ( $Tenure_{it}$ ). This approach provides a tangible measure of the duration of the audit engagement, thereby serving as an indicator of the strength and stability of the audit firm-client relationship.

Our regression model also adds several control variables that may impact a company's decision to change audit firms, including company size (*Size*), leverage level (*Lev*), profitability (*ROA*), growth rate (*Growth*), accounts receivable ratio (*Rec*), management change (*Control*), management cost ratio (*Mfee*), top 10 audit firms (*Big10*), number of certified public accountants from audit firm (*CPAnum*), audit fee change rate (*Feech*), audit opinion (*Opinion*), equity concentration (*Balance*), whether the CEO also serves as chairman (*Dual*), and company age (*Age*). In addition, our study controls the year-fixed effects (*Year*), and industry-fixed effects (*Industry*).  $\varepsilon_{it}$  is the proxy variable of the random disturbance term. The specific definitions of each variable are shown in the Appendix.

## 4. Empirical results and discussion

### 4.1. Descriptive statistics

Table 2 illustrates that the mean value of the switch from penalized audit firms is 0.107, signifying that 10.7 % of the companies switched their audit firms within one year following the punishment against the audit firms. Conversely, 89.3 % of the companies remained unchanged, underscoring the imperative for Chinese listed companies to heighten awareness regarding the negative effects associated with the penalization of audit firms. The mean company financing motivation (*Inject*) is 0.082, suggesting that 8.2 % of companies exhibit a pronounced inclination toward financing. Additionally, the average corporate reputation (*Rep*) is 4.191, and the median is 4.143, which indicates that the distribution of corporate reputation scores is relatively uniform. The minimum and maximum value of the tenure client relationship (*Tenure*) is 1 year and 19 years, and the standard deviation is 4.4. These results indicate that there is a considerable difference in the audit tenure of each company, which is consistent with the reality of China's audit market.

Our study additionally performs a group mean difference test based on whether the company has replaced the penalized audit firm. The results are presented in Table 3. The mean difference coefficient of the company's financing motivation (*Inject*) is 0.052, exhibiting statistical significance in the negative direction. This result suggests that companies opting to change the penalized audit firm demonstrate a heightened inclination toward financing. The coefficient of corporate reputation (*Rep*) is  $-0.247$ , which is significant and negative, indicating that companies that replace penalized audit firms have a higher reputation. The coefficient of the audit firm-client relationship (*Tenure*) is positive and significant at 0.719, which indicates that companies that have not switched from the penalized audit firms have closer cooperation with them, which is consistent with the expectations of our study.

### 4.2. Correlation matrix

Table 4 presents the correlation matrix among the main variables using Pearson correlation coefficients. As Table 4 shows, the correlation coefficients between the explanatory variables and *Inject* as well as *Rep* are all positive and highly significant. The correlation coefficients between the explanatory variables and *Tenure* are negative and have a high level of significance. Most correlation coefficients of explanatory and control variables are lower than 0.5, and only the correlation coefficients of *Size* with *Lev* and *Size* with *Rep* are relatively higher. Taking together, the correlation coefficient reported in Table 4 indicates that there is no serious problem of multicollinearity in our regression.

Variance inflation factor (VIF) values measure the extent of multicollinearity among the variables, with values below 10 indicating an acceptable level of multicollinearity. The inverse VIF ( $1/VIF$ ) represents the proportion of variance that is not explained by other variables in the model. To assess multicollinearity in the regression model, we calculated the VIF for each independent variable. The results in Table 5 show that the VIF values for all variables are well below 10, indicating that there is no serious problem of multicollinearity in the model. The average VIF values were 1.33, 1.36, and 1.34 in the three models, further confirming that multicollinearity does not pose a substantial problem.

### 4.3. Main regression results

Column (1) of Table 6 examines the impact of corporate financing motivation on the decision to replace a penalized audit firm. The results show that the coefficient of *Inject* is 0.523, which is significantly positive at the 1 % level, indicating that companies with

<sup>5</sup> The media plays an important role in shaping corporate reputation (Deephhouse & Carter, 2005). According to Wei et al. (2017), the information reported by the media comes from various sources, such as company press releases, stakeholders like consumers, suppliers, government entities, and specialized rating agencies, as well as contributions from media professionals. Therefore, "firms and stakeholders' debate what constitutes a good firm, and which firms have good reputations" based on media news (Deephhouse, 2000, p. 1097).

**Table 2**  
Summary statistics.

Variables	Observations	Mean	SD	Min	P25	Median	P75	Max
Switch	4945	0.107	0.309	0.000	0.000	0.000	0.000	1.000
Inject	4945	0.082	0.274	0.000	0.000	0.000	0.000	1.000
Rep	4945	4.191	0.925	2.079	3.611	4.143	4.644	7.494
Tenure	4945	6.401	4.400	1.000	3.000	6.000	9.000	19.000
Size	4945	22.069	1.197	19.406	21.189	21.925	22.779	26.444
Lev	4945	0.407	0.206	0.027	0.242	0.391	0.553	0.925
ROA	4945	0.039	0.073	−0.375	0.013	0.040	0.075	0.244
Growth	4945	0.165	0.397	−0.648	−0.023	0.107	0.267	3.541
Rec	4945	0.133	0.104	0.000	0.050	0.114	0.191	0.506
Control	4945	0.251	0.434	0.000	0.000	0.000	1.000	1.000
Mfee	4945	0.090	0.069	0.007	0.045	0.072	0.113	0.584
Big10	4945	0.676	0.468	0.000	0.000	1.000	1.000	1.000
CPAnum	4945	7.194	0.607	5.313	6.940	7.387	7.654	7.808
Feech	4945	−0.079	0.241	−1.021	−0.160	0.000	0.000	0.685
Opinion	4945	0.964	0.185	0.000	1.000	1.000	1.000	1.000
Balance	4945	0.375	0.286	0.006	0.130	0.297	0.590	1.000
Dual	4945	0.312	0.463	0.000	0.000	0.000	1.000	1.000
Age	4945	2.946	0.332	1.099	2.773	2.996	3.178	3.638

Note: This table summarizes the main characteristics of the sample firms. The sample period is 2008–2023, and the unit of observation is the firm-year. All variables are defined in the Appendix.

**Table 3**  
Univariate test.

Variables	Switch = 0	Mean1	Switch = 1	Mean2	Mean Diff
Inject	4411	0.077	534	0.128	−0.052***
Rep	4411	4.166	534	4.399	−0.247***
Tenure	4411	6.472	534	5.809	0.719***
Size	4411	22.053	534	22.198	−0.142**
Lev	4411	0.402	534	0.445	−0.043***
ROA	4411	0.041	534	0.026	0.014***
Growth	4411	0.161	534	0.195	−0.034
Rec	4411	0.133	534	0.130	0.003
Control	4411	0.241	534	0.334	−0.092***
Mfee	4411	0.089	534	0.093	−0.005
Big10	4411	0.696	534	0.507	0.190***
CPAnum	4411	7.236	534	6.837	0.399***
Feech	4411	−0.078	534	−0.089	0.011
Opinion	4411	0.967	534	0.940	0.031***
Balance	4411	0.379	534	0.342	0.035***
Dual	4411	0.316	534	0.280	0.037*
Age	4411	2.948	534	2.922	0.029*

Note: This table shows the results of the univariate test. The statistical significance for the differences in mean values between the companies that change the penalized audit firm and those that do not is represented by \*, \*\*, and \*\*\* at the 10 %, 5 %, and 1 % levels, respectively. All variables are defined in the Appendix.

financing incentives are more likely to terminate cooperation with penalized audit firms. Column (2) examines the impact of corporate reputation on changing from the penalized audit firm. The results show that the coefficient of *Rep* is 0.241, which is significantly positive at the 1 % level, indicating that companies with high reputations are associated with the likelihood of replacing penalized auditor firms. Column (3) examines the impact of the audit firm-client relationship on the change from the penalized audit firm. The coefficient of *Rep* is −0.042, which is significantly negative at the 1 % level, indicating that companies with high audit firm-client relationships are associated with the likelihood of maintaining penalized auditor-firm cooperation.

In summary, based on the baseline regressions, we can infer that companies with financing incentives and higher reputations perceive that continuing to maintain cooperation with penalized audit firms has a potentially adverse effect on company performance and thus will change audit firms. For companies with closer firm-client relationships, the benefit of continuing to cooperate outweighs the potential adverse effects, and thus, they will choose to maintain their cooperation. Moreover, compared with corporate reputation and firm-client relationship, corporate financing motives are more closely related to the replacement of a punished audit firm, which may be because financing, as an important financial activity of the company, has a critical impact on the survival of the company. When the audit firm is punished and has a potential negative impact on financing activities, the company is more inclined to change the punished audit firm.

**Table 4**  
Correlation matrix.

Variables	Switch	Inject	Rep	Tenure	Size	Lev	ROA	Growth	Rec	Control	Mfee	Big10	CPAnum	Feech	Opinion	Balance	Dual	Age
Switch	1.000																	
Inject	0.058***	1.000																
Rep	0.078***	0.038***	1.000															
Tenure	−0.047***	0.024*	0.137***	1.000														
Size	0.037***	0.012	0.381***	0.184***	1.000													
Lev	0.065***	0.080***	0.153***	0.093***	0.498***	1.000												
ROA	−0.062***	0.006	0.118***	−0.038***	−0.028**	−0.368***	1.000											
Growth	0.026*	0.073***	0.088***	−0.010	0.059***	0.057***	0.253***	1.000										
Rec	−0.008	0.042***	−0.113***	−0.094***	−0.190***	0.061***	−0.051***	0.034**	1.000									
Control	0.066***	−0.036**	0.013	−0.001	0.092***	0.125***	−0.119***	−0.002	−0.064***	1.000								
Mfee	0.019	0.013	−0.069***	−0.029**	−0.313***	−0.201***	−0.228***	−0.143***	−0.089***	0.018	1.000							
Big10	−0.125***	0.055***	0.019	0.054***	−0.003	−0.038***	0.120***	0.061***	0.011	−0.044***	0.013	1.000						
CPAnum	−0.204***	0.005	0.012	0.001	0.055***	−0.060***	0.090***	0.002	0.051***	−0.032**	0.001	0.667***	1.000					
Feech	−0.014	−0.055***	−0.070***	−0.025*	−0.132***	−0.092***	−0.016	−0.195***	−0.007	−0.012	0.012	−0.026*	−0.061***	1.000				
Opinion	−0.046***	0.034**	−0.004	−0.010	0.032**	−0.137***	0.316***	0.076***	0.007	−0.061***	−0.127***	0.062***	0.054***	0.003	1.000			
Balance	−0.040***	−0.011	−0.034**	−0.006	−0.098***	−0.086***	−0.033**	−0.004	0.076***	−0.032**	0.058***	−0.015	0.013	0.004	−0.047***	1.000		
Dual	−0.024*	0.018	−0.032**	−0.011	−0.195***	−0.158***	0.061***	−0.001	0.076***	−0.183***	0.050***	0.033**	0.046***	0.009	0.022	0.038***	1.000	
Age	−0.025*	−0.068***	0.046***	0.160***	0.232***	0.179***	−0.130***	−0.075***	−0.064***	0.101***	−0.041***	−0.122***	0.065***	−0.019	−0.080***	−0.033**	−0.113***	1.000

Notes: This table reports the correlation matrix of our main variables. \*, \*\*, and \*\*\* denote significant levels of 10 %, 5 %, and 1 %, respectively. All variables are defined in the Appendix.

**Table 5**  
Variance inflation factor.

Variables	VIF	1/VIF	VIF	1/VIF	VIF	1/VIF
Inject	1.03	0.973				
Rep			1.22	0.822		
Tenure					1.070	0.933
Size	1.67	0.597	1.88	0.532	1.700	0.587
Lev	1.78	0.561	1.77	0.565	1.770	0.566
ROA	1.54	0.650	1.57	0.636	1.540	0.649
Growth	1.16	0.865	1.15	0.866	1.150	0.867
Rec	1.13	0.887	1.13	0.887	1.130	0.885
Control	1.06	0.941	1.06	0.942	1.060	0.942
Mfee	1.27	0.789	1.28	0.784	1.260	0.791
Big10	1.93	0.517	1.93	0.518	1.960	0.511
CPAnum	1.94	0.515	1.94	0.515	1.950	0.512
Feech	1.07	0.937	1.07	0.939	1.070	0.939
Opinion	1.13	0.886	1.13	0.884	1.130	0.887
Balance	1.02	0.976	1.02	0.976	1.020	0.976
Dual	1.08	0.924	1.08	0.922	1.080	0.923
Age	1.15	0.868	1.15	0.870	1.170	0.853
Mean VIF	1.33		1.36		1.34	

Note: The table reports the variance inflation factor (VIF) and its inverse (1/VIF) for the independent variables used in the regression analysis. All variables are defined in the Appendix.

#### 4.4. Endogeneity and robustness tests

##### 4.4.1. Propensity score matching

Considering the degree of difference in the financial or governance status between companies with as well as without financing incentives, with different degrees of reputation, and with different firm-client relationships, our study employs the propensity score matching (PSM) method to conduct robustness tests. Referring to [Dhaliwal et al. \(2016\)](#), we divide the sample into treatment and control groups based on whether the company publishes a financing plan in the following year, whether the company's reputation exceeds the industry annual median, and whether the number of consecutive years of service of the auditing firm hired by the client company in the current year exceeds the industry annual median, respectively. All control variables are selected as covariates to calculate the propensity score by estimating the logit model. Then, based on the propensity scores, we use the 1:2 nearest neighbor matching method. As shown in [Table 7](#), the regression results for the main variables are consistent with the main regression, which again verifies the hypotheses of this study.

##### 4.4.2. Instrumental variable regression

Although the study attempts to control for the main factors influencing audit firm changes, issues related to omitted variable bias and measurement error may still persist. To address these concerns, we further conduct instrumental variable two-stage regressions. We choose the one-period lagged number of firms in the province-industry issuing refinancing plans (*Inject\_IV*), the one-period lagged province-industry average of corporate reputation (*Rep\_IV*), and the one-period lagged province-industry average of the number of consecutive years that companies have been working with their incumbent auditing firms (*Tenure\_IV*) as instrumental variables. The regression results are presented in [Table 8](#). The instrumental variables are significantly positive at the 1 % level in the first-stage regression. The Kleibergen-Paap rk LM statistic is significant at the 1 % level, which rejects the original hypothesis that the instrumental variables are under-identified. The Cragg-Donald Wald F statistic is greater than the critical value of the Stock-Yogo weak instrumental variable identification F test at the 10 % significance level, which rejects the original hypothesis that the weak instrumental variables are weak. In summary, the instrumental variables selected in this study are reasonable and reliable. Whereas, in the second-stage regression, the regression coefficients of *Inject* and *Rep* are positive at the 5 % and 1 % levels, respectively, and the regression coefficient of *Tenure* is significantly negative at the 10 % level, which indicates that the main conclusions of this study still stand.

##### 4.4.3. GMM regression

To mitigate potential endogeneity in the model estimation, we use the lagged value of *Switch* as an instrumental variable and conduct a system GMM regression to test the robustness of our main findings. The regression results in [Table 9](#) show that the coefficients of *Inject* and *Rep* are significantly positive at the 1 % level in both regressions, and the coefficient of *Tenure* is significantly negative at the 1 % level, indicating that after controlling for the endogeneity of *L.Switch* and its resulting endogeneity, the effects of financing incentives, corporate reputation, and firm-client relationships on the change of penalized audit firms still exist, which confirms the robustness of the model. The statistical values of AR (1) and AR (2) indicate the existence of first-order serial correlation, but not second-order serial correlation, and the p-value of Hansen's test is greater than 0.1, indicating that the choice of instrumental variables is valid.

**Table 6**  
Main regression results.

Variables	(1)	(2)	(3)
	Switch	Switch	Switch
Inject	0.523*** (3.269)		
Rep		0.241*** (3.763)	
Tenure			−0.042*** (−3.186)
Size	0.218*** (3.922)	0.135** (2.299)	0.240*** (4.279)
Lev	−0.360 (−1.034)	−0.322 (−0.925)	−0.273 (−0.798)
ROA	−0.207** (−2.576)	−0.249*** (−3.138)	−0.207** (−2.563)
Growth	0.178 (1.313)	0.199 (1.470)	0.195 (1.456)
Rec	0.058 (0.994)	0.068 (1.169)	0.053 (0.918)
Control	0.417*** (3.712)	0.408*** (3.624)	0.398*** (3.544)
Mfee	0.055 (0.717)	0.038 (0.502)	0.067 (0.874)
Big10	−0.370 (−1.358)	−0.399 (−1.465)	−0.282 (−1.024)
CPAnum	−0.113*** (−6.911)	−0.112*** (−6.907)	−0.119*** (−7.160)
Feech	−0.054 (−0.220)	−0.079 (−0.323)	−0.076 (−0.318)
Opinion	−0.036 (−1.512)	−0.027 (−1.117)	−0.033 (−1.396)
Balance	−0.462** (−2.450)	−0.473** (−2.515)	−0.455** (−2.420)
Dual	0.123 (1.064)	0.115 (0.996)	0.135 (1.165)
Age	0.006 (0.031)	0.009 (0.049)	0.052 (0.293)
Constant	0.609 (0.382)	1.452 (0.913)	0.498 (0.314)
Year	Yes	Yes	Yes
Industry	Yes	Yes	Yes
Observations	4945	4945	4945
Pseudo R <sup>2</sup>	0.149	0.150	0.149

Note: This table provides the results of regressions of firm financing motives (*Inject*), firm reputation (*Rep*), and the audit firm–client relationship (*Tenure*) on the decision to change the penalized audit firm. Switch is a dummy variable representing whether the listed firm chose a new auditing firm in the current year to replace the penalized auditing firm. The z-statistics are reported in parentheses, while the estimated standard errors are clustered at the firm level. \*, \*\*, and \*\*\* denote significance at the 10 %, 5 %, and 1 % levels, respectively. Definitions of all variables used in this study can be found in the Appendix.

#### 4.4.4. Heckman two-stage model

To further address potential sample selection bias, we employ the Heckman two-stage regression model. In the first stage, we use the average values of financing incentives, corporate reputation, and auditor–client relationship among firms within the same region and industry in the same year as exogenous variables, while keeping the other control variables consistent with the baseline regression. The Inverse Mills Ratio (*IMR*), derived from the first-stage estimation, is then included as an additional control variable in the second-stage regression. As shown in Table 10, the coefficients of *Inject* and *Rep* remain significantly positive at the 1 % level, while the coefficient of *Tenure* is significantly negative at the 1 % level. These results indicate that the main conclusions of the study remain robust after accounting for endogeneity arising from sample selection bias.

#### 4.4.5. Additional controls

To further verify results, we add the audit firm industry specialization indicator *Msr* to the model, because the level of specialization of audit firms may affect the willingness of client companies to cooperate (Fung et al., 2012). *Msr* is measured using  $\sum_{j=1}^J \text{REV}_{ikj} / \sum_{i=1}^I \sum_{j=1}^J \text{REV}_{ikj}$ , which indicates the market share of audit firms in the industry. where  $\sum_{j=1}^J \text{REV}_{ikj}$  is the total operating income of *i* audit firm's clients in industry *k*, and  $\sum_{i=1}^I \sum_{j=1}^J \text{REV}_{ikj}$  is the total operating income of all clients in industry *k*. We also control for regional fixed effects at the province level. The regression in Table 11 shows that the results after controlling for audit firm industry specialization and regional fixed effects are consistent with the main regression and support the research hypotheses in this study.

**Table 7**  
PSM test.

Variables	(1)	(2)	(3)
	Switch	Switch	Switch
Inject	0.696*** (2.918)		
Rep		0.284*** (3.788)	
Tenure			-0.032** (-2.187)
Size	0.372*** (3.022)	0.123* (1.796)	0.250*** (4.003)
Lev	-1.134 (-1.468)	-0.613 (-1.524)	-0.114 (-0.289)
ROA	-0.355** (-2.092)	-0.289*** (-3.140)	-0.198** (-2.189)
Growth	0.491** (2.314)	0.080 (0.476)	0.074 (0.460)
Rec	0.099 (0.863)	0.097 (1.487)	0.037 (0.568)
Control	0.535** (2.117)	0.509*** (3.889)	0.387*** (3.035)
Mfee	0.151 (0.938)	-0.024 (-0.261)	0.070 (0.796)
Big10	-1.020** (-2.058)	-0.403 (-1.187)	-0.194 (-0.609)
CPAnum	-0.090*** (-2.821)	-0.105*** (-5.223)	-0.117*** (-6.161)
Feech	0.313 (0.583)	-0.086 (-0.301)	0.041 (0.141)
Opinion	-0.007 (-0.123)	-0.047* (-1.763)	-0.010 (-0.364)
Balance	-0.260 (-0.708)	-0.408* (-1.847)	-0.457** (-2.121)
Dual	0.274 (1.145)	0.015 (0.109)	0.196 (1.467)
Age	0.419 (1.247)	0.034 (0.155)	-0.136 (-0.628)
Constant	-4.356 (-1.456)	1.850 (0.960)	0.418 (0.232)
Year	Yes	Yes	Yes
Industry	Yes	Yes	Yes
Observations	1086	3562	3552
Pseudo R <sup>2</sup>	0.224	0.158	0.129

Note: This table reports the PSM test results based on 1:2 nearest neighbor matching method. The z-statistics are reported in parentheses, while the estimated standard errors are clustered at the firm level. \*, \*\*, and \*\*\* denote significance at the 10 %, 5 %, and 1 % levels, respectively. The definition of each variable can be found in the Appendix.

#### 4.4.6. Delete partial sample

Based on the baseline regression, we further consider the possible interference of changing audit firms without changing auditors, the financial crisis, the COVID-19 pandemic on the research conclusions, and the long-time horizon of the sample on the research conclusions:

- (1) Some companies choose to accompany departing audit partners to new audit firms upon disengaging from a penalized audit firm, a prevalent phenomenon observed in the Chinese audit market (Chang et al., 2019). Due to the existence of a “spillover effect” from the audit firm’s punishment, it is difficult to completely disentangle the relationship between the audited client, the auditor, and the penalized audit firm. At the same time, these relationships may imply the existence of a cooperative bond between the signing accountant and the management of the audited entity that goes beyond the functional relationship that is established because of the exchange of work. Consequently, there is some noise in testing the real motivation for switching from the penalized audit firm. For this reason, we removed the sample of changing audit firms without changing auditors from the sample of companies that changed firms after their audit firm was penalized. Panel A of Table 12 provides the regression results after excluding the above samples, where the coefficients on *Inject* and *Rep* are significantly positive at the 1 % level, and the coefficient on *Tenure* is significantly negative at the 1 % level, which is consistent with the main regression results.
- (2) We exclude the sample observations from 2008 to 2009 and 2020–2023 and re-perform the regression analysis to exclude the possible interference of the abnormal shocks of the financial crisis and the COVID-19 pandemic on the research conclusions. The results in Panels B and C of Table 12 show that after excluding the effects of the above abnormal shocks, the regression results are consistent with the benchmark regression, which proves the robustness of the research findings.

**Table 8**  
Instrumental variable regression.

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Inject	Switch	Rep	Switch	Tenure	Switch
Inject_IV	0.015*** (3.427)					
Inject		0.120** (2.457)				
Rep_IV			0.142*** (4.891)			
Rep				0.345*** (2.748)		
Tenure_IV					0.252*** (5.902)	
Tenure						−0.052* (−1.860)
Size	−0.001 (−0.138)	0.238*** (4.074)	0.314*** (22.162)	0.197*** (3.308)	0.641*** (9.224)	0.228*** (4.057)
Lev	0.156*** (6.015)	−0.335 (−0.915)	0.227*** (2.745)	−0.307 (−0.845)	0.645 (1.524)	−0.358 (−1.030)
ROA	0.005 (0.897)	−0.181** (−2.092)	0.203*** (9.352)	−0.205** (−2.482)	−0.128 (−1.215)	−0.197** (−2.425)
Growth	0.034*** (2.640)	0.134 (0.915)	0.067** (2.036)	0.237* (1.706)	−0.038 (−0.234)	0.172 (1.272)
Rec	0.003 (0.732)	0.084 (1.379)	−0.019 (−1.415)	0.088 (1.471)	−0.225*** (−3.222)	0.066 (1.110)
Control	−0.017** (−2.056)	0.389*** (3.260)	−0.028 (−0.996)	0.397*** (3.327)	−0.177 (−1.174)	0.341*** (2.964)
Mfee	0.014** (2.308)	0.076 (0.919)	0.072*** (3.161)	0.013 (0.165)	0.128 (1.157)	0.025 (0.313)
Big10	−0.002 (−0.170)	−0.329 (−1.102)	0.062 (1.533)	−0.591** (−2.147)	0.512** (2.231)	−0.246 (−1.172)
CPAnum	−0.000 (−0.526)	−0.122*** (−6.940)	−0.004 (−1.318)	−0.128*** (−7.807)	−0.050*** (−2.794)	−0.128*** (−8.993)
Feech	−0.049*** (−2.845)	−0.126 (−0.477)	0.016 (0.312)	−0.135 (−0.531)	0.004 (0.016)	−0.238 (−0.958)
Opinion	0.005*** (3.017)	−0.025 (−0.989)	−0.017* (−1.887)	−0.027 (−1.108)	0.021 (0.588)	−0.032 (−1.280)
Balance	−0.008 (−0.641)	−0.547*** (−2.770)	0.033 (0.785)	−0.492** (−2.494)	−0.020 (−0.088)	−0.414** (−2.186)
Dual	0.006 (0.653)	0.183 (1.513)	0.054** (2.053)	0.118 (0.985)	0.176 (1.268)	0.124 (1.068)
Age	−0.016 (−1.184)	−0.010 (−0.053)	−0.131*** (−3.171)	0.084 (0.446)	0.473*** (2.900)	0.225* (1.720)
Constant	0.038 (0.332)	−0.018 (−0.011)	−3.044*** (−7.474)	1.201 (0.700)	−7.606*** (−3.764)	1.841 (1.147)
Year	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4823	4823	4457	4457	4708	4708
Adj/Pseudo R <sup>2</sup>	0.046	0.132	0.292	0.165	0.075	0.166
Kleibergen-Paap rk LM statistic	33.142***		74.522***			
Cragg-Donald Wald F statistic	48.467		135.131		53.038***	
					107.252	

Note: This table reports instrumental regressions results. All regressions include control variables and fixed effects by year, and industry. The t-statistics are reported in parentheses in columns (3) and (5), the z-statistics are reported in parentheses in columns (1), (2), (4), and (6), while estimated standard errors are clustered at the firm level. \*, \*\*, and \*\*\* denote significance at the 10 %, 5 %, and 1 % levels, respectively. The definition of each variable can be found in the Appendix.

- (3) Considering the long-time horizon of the sample in this study, we further conduct the robustness test for shortening the sample interval by deleting the initial three years and the last three years of the sample, retaining only the sample from 2012 to 2020, and rerunning the regression. The results in Panel D of Table 12 show that the regression coefficients of *Inject* and *Rep* are positive at the 1 % and 5 % levels, respectively, and the regression coefficient of *Tenure* is significantly negative at the 5 % level, which indicates that the main conclusions of this study still stand.

#### 4.4.7. Change regression model

Given that the explanatory variables are binary, we further conduct a probit regression. The results, presented in columns (1) to (3) of Table 13, show that the coefficients on *Inject* and *Rep* remain significantly positive at the 1 % level, while the coefficient on *Tenure*

**Table 9**  
GMM regression.

Variables	(1)	(2)	(3)
	Switch	Switch	Switch
L.Switch	0.010** (2.288)	0.015** (2.383)	0.007* (1.945)
Inject	0.020*** (2.717)		
Rep		0.005*** (5.348)	
Tenure			−0.004*** (−2.742)
Size	0.013** (2.563)	0.023*** (3.038)	0.020*** (3.804)
Lev	−0.031* (−1.667)	−0.079*** (−2.753)	−0.057*** (−3.022)
ROA	0.039 (1.365)	−0.010 (−0.255)	0.016 (0.559)
Growth	−0.004 (−0.831)	−0.002 (−0.380)	0.003 (0.676)
Rec	0.051 (1.297)	0.110** (2.037)	0.083*** (2.927)
Control	0.001 (0.199)	0.003 (0.616)	−0.001 (−0.168)
Mfee	0.108*** (3.284)	0.133*** (3.291)	0.159*** (4.764)
Big10	−0.255** (−2.000)	−0.010 (−0.886)	0.000 (0.047)
CPAnum	−0.021 (−0.464)	−0.019 (−1.140)	−0.026** (−2.068)
Feech	−0.003 (−0.325)	−0.004 (−0.157)	−0.002 (−0.187)
Opinion	−0.019** (−2.109)	0.014** (2.073)	0.011** (2.151)
Balance	0.009 (0.653)	0.023 (1.444)	0.025** (2.137)
Dual	0.009** (2.058)	−0.396* (−1.897)	0.044*** (4.646)
Age	0.023* (1.910)	−0.009 (−0.127)	−0.004*** (−3.575)
Constant	−0.107 (−0.833)	−0.283 (−1.335)	−0.102 (−0.890)
Year	Yes	Yes	Yes
Industry	Yes	Yes	Yes
Observations	4731	4731	4731
AR(1)	0.000	0.000	0.000
AR(2)	0.261	0.604	0.250
Sargan	0.065	0.000	0.086
Hansen	0.958	0.914	0.737
Wald chi <sup>2</sup>	1149.74***	219.21***	1294.15***

Note: This table reports GMM regressions results. All regressions include control variables and fixed effects by year, and industry. The z-statistics are reported in parentheses, while estimated standard errors are clustered at the firm level. \*, \*\*, and \*\*\* denote significance at the 10 %, 5 %, and 1 % levels, respectively. The definition of each variable can be found in the Appendix.

remains significantly negative at the 1 % level, which is consistent with those from the main regression. In addition, to address potential company-level unobservable factors that may bias the results, we extend the baseline model by incorporating firm fixed effects. The corresponding results, reported in columns (4) to (6) of Table 13, are also consistent with the baseline estimates, further confirming the robustness and reliability of the study's conclusions.

#### 4.4.8. Alternative measures of main variables

To further test the robustness of our findings, we replace the key explanatory variables with alternative proxies.

For financing motives, companies facing financing constraints typically exhibit stronger financing needs. Following Whited and Wu (2006), we construct the *WW* index as a proxy for financing constraints. For corporate reputation, instead of using the natural logarithm of all positive news reports in the benchmark regression, we use the natural logarithm of original positive news reports (*Rep\_orig*) to re-measure corporate reputation. For the audit firm-client relationship, we define a dummy variable *Local* as a proxy, which equals 1 if the client company and audit firm are in the same province, and 0 otherwise.

The regression results using these alternative variables are reported in Table 14. The coefficients of *WW* and *Rep\_orig* are significantly positive at the 5 % level, while the coefficient of *Local* is significantly negative at the 1 % level. These results are consistent with

**Table 10**  
Heckman two-stage model.

	(1)	(2)	(3)
	Switch	Switch	Switch
Inject	0.534*** (3.342)		
Rep		0.241*** (3.759)	
Tenure			−0.042*** (−3.191)
Size	0.220*** (3.968)	0.134** (2.295)	0.247*** (4.394)
Lev	−0.427 (−1.230)	−0.323 (−0.929)	−0.349 (−1.025)
Roa	−0.213*** (−2.642)	−0.248*** (−3.137)	−0.212*** (−2.626)
Growth	0.184 (1.357)	0.197 (1.452)	0.203 (1.515)
Rec	0.063 (1.080)	0.068 (1.170)	0.058 (1.001)
Control	0.420*** (3.733)	0.409*** (3.634)	0.399*** (3.544)
Mfee	0.043 (0.557)	0.039 (0.510)	0.057 (0.744)
Big10	−0.360 (−1.322)	−0.400 (−1.468)	−0.279 (−1.014)
CPAnum	−0.112*** (−6.856)	−0.113*** (−6.909)	−0.119*** (−7.174)
Feech	−0.064 (−0.260)	−0.080 (−0.328)	−0.082 (−0.343)
Opinion	−0.037 (−1.567)	−0.027 (−1.111)	−0.035 (−1.466)
Balance	−0.490*** (−2.582)	−0.473** (−2.514)	−0.478** (−2.525)
Dual	0.121 (1.049)	0.115 (0.998)	0.138 (1.191)
FirmAge	0.013 (0.075)	0.010 (0.054)	0.057 (0.319)
IMR	−0.003 (−1.121)	0.001 (0.522)	0.001 (0.430)
Constant	0.557 (0.349)	1.469 (0.922)	0.480 (0.303)
Year	Yes	Yes	Yes
Industry	Yes	Yes	Yes
Observations	4945	4945	4945
Pseudo R <sup>2</sup>	0.149	0.151	0.149

Note: This table reports the results of the Heckman two-stage model examining the determinants of auditor switching. The dependent variable in all columns is the binary indicator *Switch*, equal to 1 if the company changes its auditor and 0 otherwise. In Column (1), *Inject* is used to proxy for financing incentives; in Column (2), *Rep* captures corporate reputation; and in Column (3), *Tenure* reflects the length of the audit firm-client relationship. The inverse Mills ratio (*IMR*) from the first-stage selection equation is included to correct for potential sample selection bias. Year and industry fixed effects are included in all specifications. Robust t-statistics are reported in parentheses. \*\*\*, \*\*, and \* denote statistical significance at the 1 %, 5 %, and 10 % levels, respectively. The definition of each variable can be found in the Appendix.

the main findings: companies with stronger financing motives and higher reputations are more likely to change their relationship with penalized audit firms, whereas companies with closer geographic ties to their auditors are more inclined to maintain the existing relationship.

#### 4.5. Heterogeneity tests

##### 4.5.1. Administrative punishment

When the CSRC punishes the audit firm more severely and imposes higher fines, the resulting regulatory inconvenience and negative reputation spillover effect may be more obvious. Companies with a desire for financing or high reputations are more motivated to change audit firms to demonstrate the high quality of their financial information, gain the favor of investors, and maintain their reputation. The strong negative impact of the investigation on their auditors also makes it difficult for companies with a close audit firm-client relationship to continue to maintain a cooperative relationship with the penalized audit firm. When the punishment intensity is low and the fine amount is minimal, the motivation of companies with a financing motivation or high reputation to

**Table 11**  
Additional controls.

Variables	(1)	(2)	(3)
	Switch	Switch	Switch
Inject	0.549*** (3.411)		
Rep		0.223*** (3.452)	
Tenure			−0.031** (−2.364)
Size	0.242*** (4.303)	0.147** (2.383)	0.242*** (4.056)
Lev	−0.374 (−1.069)	−0.388 (−1.105)	−0.351 (−1.007)
ROA	−0.182** (−2.235)	−0.211** (−2.545)	−0.169** (−2.027)
Growth	0.164 (1.230)	0.183 (1.339)	0.179 (1.320)
Rec	0.060 (1.040)	0.072 (1.232)	0.058 (1.006)
Control	0.392*** (3.463)	0.380*** (3.306)	0.372*** (3.246)
Mfee	0.039 (0.497)	−0.034 (−0.410)	−0.009 (−0.108)
Big10	−0.186 (−0.700)	−0.263 (−0.950)	−0.179 (−0.644)
CPAnum	−0.082*** (−4.559)	−0.086*** (−4.706)	−0.092*** (−4.955)
Feech	−0.072 (−0.295)	−0.079 (−0.326)	−0.081 (−0.339)
Opinion	−0.040* (−1.674)	−0.037 (−1.502)	−0.042* (−1.727)
Balance	−0.478** (−2.525)	−0.457** (−2.360)	−0.441** (−2.283)
Dual	0.124 (1.078)	0.104 (0.874)	0.124 (1.051)
Age	−0.035 (−0.189)	−0.027 (−0.149)	0.011 (0.062)
Msr	−0.084*** (−4.303)	−0.081*** (−4.011)	−0.079*** (−3.908)
Constant	−1.072 (−0.646)	0.166 (0.096)	−0.750 (−0.437)
Year	Yes	Yes	Yes
Industry	Yes	Yes	Yes
Province	Yes	Yes	Yes
Observations	4945	4945	4945
Pseudo R <sup>2</sup>	0.158	0.174	0.172

Note: This table reports the regression results after controlling for audit firm industry specialization. All regressions include control variables and fixed effects by year, industry, and province. The z-statistics are reported in parentheses, while estimated standard errors are clustered at the firm level. \*, \*\*, and \*\*\* denote significance at the 10 %, 5 %, and 1 % levels, respectively. The definition of each variable can be found in the Appendix.

change from the penalized audit firm is relatively weak. In this scenario, companies having a close audit firm-client relationship enhances their motivation to cooperate with the penalized audit firm.

According to the above analysis, we use the natural logarithm of the amount of punishment given to the audit firms in the CSRC's administrative punishment decision as a proxy of administrative punishment intensity (*Penalty*). This variable is used to test the differences in the dimension of administrative punishment intensity between companies' change behavior regarding penalized audit firms. Moreover, a subsample analysis is conducted according to its annual average. Columns (1) to (4) of Panel A of Table 15 reveal that when an audit firm is subject to a high degree of punishment, the corporate financing motivation (*Inject*) and corporate reputation (*REP*) are positively significant. Columns (5) to (6) show that when the punishment intensity is low, companies with a close audit firm-client relationship will maintain a cooperative relationship with the penalized audit firm. However, the relationship is insignificant when the punishment is high, which is consistent with the analysis above.

#### 4.5.2. Property rights

As an implicit institutional arrangement, the nature of property rights plays a guiding role in the allocation of various resources. Companies with varied property rights have significant differences in their interest mechanisms, resulting in different financing difficulties, reputation governance, and departmental supervision (Yang et al., 2024, 2025). To test the difference between the changed

**Table 12**  
Delete partial sample.

Panel A. Considering the Situation of Exchange Instead of Division			
Variables	(1) Switch	(2) Switch	(3) Switch
Inject	0.538*** (3.301)		
Rep		0.239*** (3.669)	
Tenure			−0.043*** (−3.228)
Constant	0.599 (0.372)	1.423 (0.888)	0.486 (0.304)
Controls	Yes	Yes	Yes
Year	Yes	Yes	Yes
Industry	Yes	Yes	Yes
Observations	4924	4924	4924
Pseudo R <sup>2</sup>	0.140	0.142	0.141
Panel B. Excluding the Effect of the Financial Crisis			
Variables	(1) Switch	(2) Switch	(3) Switch
Inject	0.599*** (3.734)		
Rep		0.258*** (3.933)	
Tenure			−0.044*** (−3.311)
Constant	0.585 (0.302)	1.259 (0.656)	0.434 (0.225)
Controls	Yes	Yes	Yes
Year	Yes	Yes	Yes
Industry	Yes	Yes	Yes
Observations	4836	4836	4836
Pseudo R <sup>2</sup>	0.155	0.157	0.155
Panel C. Excluding the Effect of COVID-19 Pandemic			
Variables	(1) Switch	(2) Switch	(3) Switch
Inject	0.363** (2.107)		
Rep		0.177** (2.349)	
Tenure			−0.033** (−2.090)
Constant	0.904 (0.429)	1.611 (0.765)	0.737 (0.353)
Controls	Yes	Yes	Yes
Year	Yes	Yes	Yes
Industry	Yes	Yes	Yes
Observations	3781	3781	3781
Pseudo R <sup>2</sup>	0.183	0.183	0.184
Panel D. Shorting the Time Range			
Variables	(1) Switch	(2) Switch	(3) Switch
Inject	0.476*** (2.705)		
Rep		0.198** (2.507)	
Tenure			−0.035** (−2.142)
Constant	4.034 (1.602)	4.700* (1.887)	3.846 (1.545)
Controls	Yes	Yes	Yes
Year	Yes	Yes	Yes
Industry	Yes	Yes	Yes
Observations	3581	3581	3581
Pseudo R <sup>2</sup>	0.205	0.205	0.204

Note: This table reports the regression results after excluding the sample that changed penalized audit firms without changing auditors (Panel A), excluding the effect of the financial crisis (Panel B), excluding the effect of COVID-19 pandemic (Panel C) and shorting the time range (Panel D). All regressions include control variables and fixed effects by year, and industry. The z-statistics are reported in parentheses, while estimated standard errors are clustered at the firm level. \*, \*\*, and \*\*\* denote significance at the 10 %, 5 %, and 1 % levels, respectively. The definition of each variable can be found in the Appendix.

**Table 13**  
Change regression model.

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Switch	Switch	Switch	Switch	Switch	Switch
Inject	0.293*** (3.405)			0.543* (1.858)		
Rep		0.124*** (3.736)			0.299** (2.012)	
Tenure			−0.021*** (−3.217)			−0.062* (−1.849)
Constant	0.259 (0.322)	0.668 (0.827)	0.176 (0.219)			
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm	No	No	No	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	No	No	No
Observations	4945	4945	4945	1012	1012	1012
Pseudo R <sup>2</sup>	0.149	0.150	0.149	0.384	0.385	0.384

Note: The table reports the regression results of changing regression model. Columns (1) to (3) show the regression results for probit models. Columns (4) to (6) show the results of regression controlling for Firm, Year fixed effects. The reason for the reduced sample sizes in columns (4) to (6) is that when estimating with the Xtlogit model, observed individuals with constant states of the explanatory variables within the sample will not enter the estimation. All regressions include control variables and fixed effects by year, and industry. The z-statistics are reported in parentheses, while estimated standard errors are clustered at the firm level. \*, \*\*, and \*\*\* denote significance at the 10 %, 5 %, and 1 % levels, respectively. The definition of each variable can be found in the Appendix.

**Table 14**  
Alternative measures of main variables.

Variables	(1)	(2)	(3)
	Switch	Switch	Switch
WW	0.467** (2.316)		
Rep_orig		0.160** (2.307)	
Local			−0.580*** (−3.477)
Constant	−0.999 (−0.576)	0.679 (0.405)	1.128 (0.692)
Controls	Yes	Yes	Yes
Year	Yes	Yes	Yes
Industry	Yes	Yes	Yes
Observations	3796	4734	4945
Pseudo R <sup>2</sup>	0.135	0.158	0.150

Note: The table reports the regression results of alternative measures of main variables. All regressions include control variables and fixed effects by year, and industry. The z-statistics are reported in parentheses, while estimated standard errors are clustered at the firm level. \*, \*\*, and \*\*\* denote significance at the 10 %, 5 %, and 1 % levels, respectively. The definition of each variable can be found in the Appendix.

behavior of companies to the penalized audit firms in the dimension of property rights, we conduct a group test on the samples according to the property rights nature of companies.

Panel B of [Table 15](#) shows the influences of a desire for financing (*Inject*) and the protection of corporate reputation (*REP*) on the decision to leave a penalized audit firm, as well as motivation to continue cooperating with penalized audit firm based on a close audit firm-client relationship (*Tenure*) only exists in the sample of non-SOEs. These variables are not significant in the sample of SOEs. On the one hand, China's financial institutions have a strong "state-owned" preference, which makes it significantly more difficult for non-SOEs to obtain financial support from financial institutions than from state-owned enterprises; moreover, due to the lack of effective government patronage, non-SOEs rely more on their reputation in terms of market access, production, and operation, which makes reputation crucial for non-SOEs ([Skinner & Srinivasan, 2012](#)). Therefore, non-SOEs have a stronger incentive to attract investors and

**Table 15**  
Heterogeneity tests.

Panel A. Administrative Penalties Intensity						
Variables	(1) Switch	(2) Switch	(3) Switch	(4) Switch	(5) Switch	(6) Switch
	High PI	Low PI	High PI	Low PI	High PI	Low PI
Inject	0.804*** (2.752)	0.278 (1.184)				
Rep			0.445*** (4.159)	0.089 (1.045)		
Tenure					−0.005 (−0.216)	−0.068*** (−3.838)
Constant	2.288 (0.996)	2.224 (0.929)	3.337 (1.464)	2.384 (0.997)	1.820 (0.801)	1.563 (0.665)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes
P-values	0.07		0.07			
Observations	2054	2891	2054	2891	0.04 2054	2891
Pseudo R <sup>2</sup>	0.200	0.158	0.209	0.158	0.193	0.167
Panel B. Property right						
Variables	(1) Switch	(2) Switch	(3) Switch	(4) Switch	(5) Switch	(6) Switch
	SOEs	non-SOEs	SOEs	non-SOEs	SOEs	non-SOEs
Inject	0.119 (0.425)	0.672*** (3.144)				
Rep			0.166* (1.739)	0.362*** (4.181)		
Tenure					−0.089*** (−4.467)	0.003 (0.150)
Constant	0.104 (0.042)	3.762* (1.675)	0.989 (0.394)	4.523** (2.068)	0.464 (0.187)	3.916* (1.766)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes
P-values	0.02		0.07			
Observations	1460	3485	1460	3485	0.02 1460	3485
Pseudo R <sup>2</sup>	0.104	0.216	0.106	0.220	0.120	0.211
Panel C. Real Earnings Management Level						
Variables	(1) Switch	(2) Switch	(3) Switch	(4) Switch	(5) Switch	(6) Switch
	Low REM	High REM	Low REM	High REM	Low REM	High REM
Inject	0.198 (0.688)	0.778*** (3.889)				
Rep			0.151 (1.427)	0.305*** (3.527)		
Tenure					−0.068*** (−3.966)	0.000 (0.023)
Constant	3.172 (1.256)	0.529 (0.254)	3.610 (1.446)	1.599 (0.764)	0.274 (0.134)	3.186 (1.264)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes
P-values	0.00		0.05			
Observations	1864	3081	1864	3081	0.02 1864	3081
Pseudo R <sup>2</sup>	0.137	0.195	0.139	0.195	0.137	0.197

Note: This table shows the subsample regression results for administrative penalties intensity (Panel A), property rights (Panel B), and real earnings management level (Panel C). ‘Empirical P Value’ is used to test the significance of coefficient difference between groups, which is obtained by 1000 bootstrap samples. All regressions include control variables and fixed effects by year, and industry. The z-statistics are reported in parentheses, while estimated standard errors are clustered at the firm level. \*, \*\*, and \*\*\* denote significance at the 10 %, 5 %, and 1 % levels, respectively. The definition of each variable can be found in the Appendix.

maintain their reputation by changing penalized audit firms. On the other hand, compared to non-SOEs, there is a natural link between SOEs and the government, and there are obvious conveniences in financing and market regulation, and SOEs themselves lack incentives to improve audit quality. Therefore, the negative relationship between the audit firm-client relationship and changing penalized audit firms is more significant in the SOE sample.

#### 4.5.3. Real earnings management level

To reduce the inspection risk, the auditor might require the company management to adjust the amount of its accrued earnings management activities after communicating and negotiating with the management of the company. However, for real earnings management behavior supported by relevant operating activities and financial data, it is difficult to make post-adjustments even after consultation with the management. Therefore, real earnings management behavior can be regarded as a red flag of audit risk to some extent (Cohen & Zarowin, 2010). It can be reasonably expected that when the level of real earnings management is high, the company itself has a high potential inspection risk. To ensure a financial report smoothly passes review, the company has the motivation to put aside the cooperative relationship with the penalized audit firm to avoid becoming a key object of the regulatory authority.

To test the difference in the level of earnings management dimension of the change motivation of companies regarding penalized audit firms, we refer to the method of Roychowdhury (2006) who calculates the real earnings management level (*REM*) of listed companies using the actual manipulation value that deviates from the expectation. Subjects are tested in groups according to the annual average of the *REM*. As shown in Panel C of Table 15, when the *REM* is high, companies with a stronger financing motivation (*Inject*) and a higher reputation (*Rep*) are more inclined to abandon their relationship with the penalized audit firms. When the level of *REM* is low, the motivation of companies to change from penalized audit firms is relatively weak. As seen in Columns (5) and (6), the audit firm-client relationship (*Tenure*) is significantly negative only when the company's *REM* is low, which indicates that the company is willing to maintain a close relationship with the audit firm only when the audit risk is low. When facing high audit risk and inspection pressure, however, it is difficult for the company to continue to maintain such cooperation.

#### 4.6. Inspection of the consequences of changing the penalized audit firm

To further explore the impact of companies replacing penalized audit firms, our study examines whether switching audit firms improves the company's accounting information quality and accounting conservatism. Based on the research design of Knechel et al. (2021), we employ the following model (4) and (5) to investigate the possible impact of companies with financing incentives or high reputations to change their relationship with penalized audit firms and the possible impact of companies with closer audit firm-client relationships to continue to maintain their relationship with penalized audit firms:

$$Opacity_{i,t} = \alpha_0 + \alpha_1 Switch_{i,t} + \alpha_2 Inject_{i,t} + \alpha_3 Switch_{i,t} \times Inject_{i,t} + \alpha_n Controls_{i,t} + Industry + Year + \varepsilon_{i,t} \quad (4)$$

$$AC_{i,t} = \alpha_0 + \alpha_1 Switch_{i,t} + \alpha_2 Inject_{i,t} + \alpha_3 Switch_{i,t} \times Inject_{i,t} + \alpha_n Controls_{i,t} + Industry + Year + \varepsilon_{i,t} \quad (5)$$

The dependent variable *Opacity* in Model (4) is defined as the company's accounting information quality, and the dependent variable *AC* in Model (5) is defined as the company's accounting conservatism level. The evaluation grade of listed companies' information disclosure as revealed by the Shanghai and Shenzhen stock exchanges is used as a proxy variable of the company's accounting information quality (*Opacity*). When the evaluation is Class A, it is assigned a value of 4; for Class B, 3; for Class C, 2; and for Class D, the value is assigned as 1. Meanwhile, we build a model based on Khan and Watts (2009) to estimate the accounting conservatism level. In addition, we introduce the interaction terms *Switch\_Inject*, *Switch\_Rep*, and *Switch\_Tenure* for economic consequence tests. The specific process of calculating the accounting conservatism level (*AC*) is as follows.

$$Earn_{i,t} = \frac{EPS_{i,t}}{P_{i,t}} = \chi_1 + \chi_2 DR_{i,t} + \chi_3 RET_{i,t} + \chi_4 DR_{i,t} \times RET_{i,t} + \varepsilon_{i,t} \quad (6)$$

where *Earn<sub>i,t</sub>* represents the accounting surplus; *RET<sub>i,t</sub>* is the stock return rate; and *DR* is a dummy variable. The value is 1 if *RET<sub>i,t</sub>* is lower than 0, zero otherwise.  $\chi_1$  stands for the intercept term,  $\chi_2$  indicates the relationship between the positive and negative returns and earnings,  $\chi_3$  indicates the reaction speed of surplus to good news, and  $\chi_4$  is the measure of robustness. The subscript *i* represents the company, and *t* represents the year.

Second, we establish an improved Basu model:

$$G\_SCORE = \chi_3 = \mu_1 + \mu_2 Size_{i,t} + \mu_3 MB_{i,t} + \mu_4 Lev_{i,t} \quad (7)$$

$$C\_SCORE = \chi_4 = \omega_1 + \omega_2 Size_{i,t} + \omega_3 MB_{i,t} + \omega_4 Lev_{i,t} \quad (8)$$

where *Size<sub>i,t</sub>* represents the value of total assets at the end of the year after taking the natural logarithm. *MB<sub>i,t</sub>* represents the ratio of the company's market value to its book value, and *Lev<sub>i,t</sub>* represents the ratio of total liabilities to total assets. Using the above model, annual cross-sectional data is used for the regression to estimate  $\mu_1$  to  $\mu_4$  and  $\omega_1$  to  $\omega_4$ . We take Formulas (5) and (6) into Formula (4) to obtain Formula (7) and finally estimate the accounting conservatism level at the company level.

$$\frac{EPS_{i,t}}{P_{i,t}} = \chi_1 + \chi_2 DR_{i,t} + \chi_3 RET_{i,t} (\mu_1 + \mu_2 Size_{i,t} + \mu_3 MB_{i,t} + \mu_4 Lev_{i,t}) + \chi_4 DR_{i,t} \times RET_{i,t} \times (\omega_1 + \omega_2 Size_{i,t} + \omega_3 MB_{i,t} + \omega_4 Lev_{i,t}) + \varepsilon_{i,t} \quad (9)$$

The regression results are shown in Table 16. Columns (1), (2), (4), and (5) report that the interaction items *Switch\_Inject* and *Switch\_Rep* are insignificant. These findings indicate that when the company has a potential financing motivation or a high reputation, the change from the penalized audit firm has no significant impact on the quality of company accounting information and the level of accounting conservatism. In Columns (3) and (6), the interaction items for *Switch\_Tenure* are significantly negative, indicating that when the audit firm-client relationship is closer, continuing to maintain the cooperative relationship with the penalized audit firm will reduce the quality and robustness of company accounting information.

## 5. Conclusions

This study investigates how Chinese listed companies respond to regulatory sanctions imposed on audit firms by the CSRC between 2008 and 2023. Using a rich dataset of penalized audit firms and their clients, we examine whether and how companies decide to switch auditors following penalties. We find that companies with stronger financing needs and higher reputational standing are more likely to disengage from penalized auditors. In contrast, companies with long-standing auditor-client relationships tend to maintain their cooperation despite penalties. The severity of the regulatory sanction and the level of real earnings management further moderate these dynamics: stronger punishments and more aggressive earnings management increase companies' propensity to switch auditors, while simultaneously weakening the influence of relational ties. Additionally, we find that these effects are concentrated in non-SOEs, suggesting that governance structure plays a crucial role in auditor choice behavior.

In terms of downstream effects, our results reveal that retaining a penalized auditor is associated with significant declines in financial reporting quality and accounting conservatism, while switching away from the penalized auditor does not materially affect reporting quality. This asymmetry highlights the potential long-term costs of maintaining audit relationships under reputational risk.

Our findings have important policy implications. First, the results demonstrate that administrative penalties issued by the CSRC, even in the absence of litigation threats, can influence corporate behavior, thereby supporting the regulatory effectiveness of such sanctions in weak-enforcement settings. Second, the study underscores structural deficiencies in the demand side of China's audit market, namely, the undervaluation of audit quality and the persistent reliance on relational contracting. To address this, regulatory agencies should monitor the motivations and outcomes of audit firm changes more closely and consider implementing incentive-compatible mechanisms that promote high-quality auditor selection. Third, emerging markets should further develop transparency tools such as public audit quality indicators and blacklists of penalized firms, while strengthening the reputation constraint mechanism to create a more competitive and accountable audit market.

More broadly, this study contributes to the global auditing literature by illustrating how institutional environments shape

**Table 16**  
Inspection of the consequences of the change from a penalized audit firm.

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Opacity	Opacity	Opacity	Gscore	Gscore	Gscore
Switch	−0.061* (−1.679)	−0.145 (−1.037)	0.052 (0.892)	−0.168* (−1.859)	−0.324 (−1.365)	0.176 (1.283)
Inject	−0.010 (−0.309)			−0.036 (−0.998)		
Switch_Inject	0.055 (0.659)			−0.070 (−0.461)		
Rep		−0.018 (−1.524)			0.015 (0.522)	
Switch_Rep		0.021 (0.680)			0.032 (0.554)	
Tenure			−0.003 (−1.221)			0.007 (0.765)
Switch_Tenure			−0.018** (−2.215)			−0.057** (−2.244)
Constant	5.303*** (18.742)	5.270*** (18.475)	5.254*** (18.510)	3.197*** (3.094)	3.291*** (3.018)	3.133*** (3.037)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4054	4054	4054	4143	4143	4143
Adjusted R <sup>2</sup>	0.221	0.222	0.223	0.024	0.024	0.026

Note: This table shows the results of changing the penalized audit firm on firm's accounting information quality and accounting conservatism. Columns (1) to (3) show the regression results for the company's accounting information quality. Columns (4) to (6) show the regression results for company's accounting conservatism. All regressions include control variables and fixed effects by year, and industry. The t-statistics are reported in parentheses, while estimated standard errors are clustered at the firm level. \*, \*\*, and \*\*\* denote significance at the 10 %, 5 %, and 1 % levels, respectively. The definition of each variable can be found in the Appendix.

governance behavior. The findings from China, characterized by low litigation risk, administrative enforcement, and relationship-driven decision-making, highlight the need to contextualize auditor switching theories within specific regulatory regimes. These insights are relevant not only for understanding auditor choice in China but also for informing regulatory policy and institutional reform in other low-enforcement emerging markets. These findings also highlight the potential for auditor sanctions to serve as signals in investor and analyst risk assessments. Finally, our findings suggest that auditor sanction information may serve as a signal of company-level governance quality and could be further integrated into investor and analyst assessments of audit risk and financial credibility.

### Author statement

We declare that our manuscript is original, has not been published before, and is not currently being considered for publication elsewhere. All authors have seen and approved the final version of the manuscript being submitted.

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### Appendix. Variable Definitions

Variables	Definitions	Data sources
Switch	If the penalized firm is changed, the Switch value is 1, otherwise, it is 0	CSRC
Inject	If there is financing motivation, the Inject value is 1, otherwise, it is 0	CSMAR
Rep	Comprehensive score of corporate reputation	CNRDS
Tenure	Number of consecutive service years of the audit firm employed by the company in the current year	Wind
Size	Natural logarithm of total assets	CSMAR
Lev	Total liabilities/total assets	CSMAR
ROA	Net profit/total assets	CSMAR
Growth	(Operating income of the current year – operating income of the previous year)/operating income of the previous year	CSMAR
Rec	Net accounts receivable/total assets	CSMAR
Control	The dummy variable takes the value of 1 if the management of the company has changed this year, and 0 if otherwise	CSMAR
Mfee	Administrative expenses/operating income	CSMAR
Big10	This dummy variable takes the value of 1 if the company employs the top 10 audit firms in China for the year, and 0 otherwise	CNRDS
CPAnum	Number of certified public accountants from audit firm employed by the company during the year	CNRDS
Feech	The natural logarithm of the proportion of the annual report audit fees of the company in the year before the punishment of the audit firm in the annual report audit fees of the current year	CSMAR
Opinion	The dummy variable takes the value of 1 if the company's financial report for the year has been issued a standard audit opinion, and 0 if otherwise	CSMAR
Balance	Proportion of shares held by the second largest shareholder/proportion of shares held by the first largest shareholder	CSMAR
Dual	The dummy variable takes the value of 1 if the CEO also serves as chairman, and 0 if otherwise	CSMAR
Age	Natural logarithm of the current year minus the year in which the company went public	CSMAR

### Data availability

The authors do not have permission to share data.

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